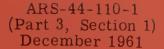
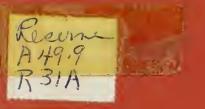
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.







TABULATIONS OF DHIA RECORDS OF DAUGHTERS OF AI SIRES

IN THE

UNITED STATES

-(Part 3, Section 1) \times (Pages 1 - 472, incl.)





Agricultural Research Service United States Department of Agriculture

INDEX TO TABLE

Daughter-Average of Sires in Service in Artificial Breeding Organizations--Grouped by State, by Breed, by Year of Freshening (Table 15)

Code	State	Page	Code	State	Page
	Section 1		S	ection 3Continue	d
11	Maine	4	52	Virginia	980
12	New Hampshire	32	54	West Virginia	1010
13	Vermont	53	55	North Carolina	1026
14	Massachusetts	100	56	South Carolina	1052
15	Rhode Island	137	57	Georgia	1062
16	Connecticut	147	58	Florida	1078
21	New York	183	61	Kentucky	1093
22	New Jersey	262	63	Tennessee	1111
2 3	Pennsylvania	308	64	Alabama	1125
31	Ohio	419	65	Mississippi	1135
			71	Arkansas	1146
	Section 2		72	Louisiana	1153
			73	Oklahoma	1160
32	Indiana	473	74	Texas	1169
33	Illinois	510	81	Montana	1187
34	Michigan	559	82	Idaho	1193
35	Wisconsin	612	83	Wyoming	1209
41	Minnesota	710	84	Colorado	1215
$\overline{42}$	Iowa.	774	85	New Mexico	1227
43	Missouri	831	86	Arizona	1232
45	North Dakota	859	87	Utah	1238
46	South Dakota	873	88	Nevada	1250
10			91	Washington	1253
	Section 3		92	Oregon	1280
	Beetion 6		93	California	1299
47	Nebraska	881	94	Puerto Rico	1311
48	Kansas	903	95	Hawaii	1312
50	Delaware	920	96	Alaska	1314
51		935	30	111d SNd	1011
2.1	Maryland	900			

TABULATIONS OF DHIA RECORDS OF DAUGHTERS OF AI SIRES IN THE UNITED STATES 1/

In this part of the AI Tabulations is Table 15. The contents of the table is indicated by the title of the table listed in the index on the back of the front cover.

These tabulations include the DHIA lactation records of all AI daughters of all sires reported to the Dairy Cattle Research Branch, AHRD, in AI service from 1939 through January 1, 1961, and the lactation records of 461, 100 daughters of 7, 618 AI sires reported to the Dairy Cattle Research Branch, AHRD, prior to May 1, 1961.

All production records used in these tabulations consist of 305-day lactation records standardized to a mature-equivalent twice-aday milking basis. When more than one lactation record were available for a cow, each record was standardized and the average of all standardized records used to represent the production capacity of the cow.

Compilation of contemporary (herd-mate) and yearly-herd-average data are dependent on herd codes to assemble such data for each sire. Because a uniform system of identifying DHIA herds by code has been in operation for only a few years, lactation records and herd-average data reported in earlier years are not identified by herd codes. Tabulations for the older sires listed, therefore, may include little or no herd-mate or yearly-herd-average data.

AI Tabulations 1961 are in 5 parts (parts 1 and 3 are divided into 3 sections), published by Dairy Cattle Research Branch, Animal Husbandry Research Division, Agricultural Research Service.

ARTIFICIAL-BREEDING ORGANIZATIONS IN THE UNITED STATES

DHIA Proved-Sire Records, of sires in AB service, indicate by code number the last AB organization in which a sire is used. Following is a complete list of AB organizations that have operated in the United States (according to reports received in the Dairy Cattle Research Branch). Some no longer exist, but sires used in such organizations may be proved or reproved, in which case reference will be made to the organization in the proved-sire record.

STATE			ORGANIZATION	STA	TE		ORGANIZATION
Name	Code	Code	Name	Name			Name
Maine	11 11	02	Androscoggin Valley ABA Androscoggin Valley & Central Maine ABA Central Maine ABA *Maine Breeding Co-op. Inc. New Hampshire ABA *New Hampshire-Vermont ABA	Wisconsin	35	12	Trempealeau Co-op. ABA
Maine Maine	11	03 04	Central Maine ABA	Wisconsin	35	13 05	Tri County ABA *Tri State Co-op. ABA
Maine	11	01	*Maine Breeding Co-op. Inc.	Wisconsin	35	14	University of Wisconsin ABA Vernon Co. Co-op. ABA
New Hampshire	12	01	New Hampshire ABA	Wisconsin	35	15 16	Wisconsin Experimental Breeding Project Al
New Hampshire	12	03	New Hampshire ABA *New Hampshire-Vermont ABA Willow Spring ABA Agri. Experimental Sta. ABA Central Vermont ABA Vermont Co-op. ABA Inc. Bristol Co. Farm Bureau Inc. ABA Massachusetts ABA Inc.	Minnocoto	41	19	Aitkin Co. ABA
New Hampshire	12	02	Willow Spring ABA	Minnesota Minnesota Minnesota	41	05	Barnum ABA
Vermont	13 13	03 01	Agri. Experimental Sta. ABA	Minnesota	41 41	06 04	Central Minnesota ABA *Consolidated Breeders Co-op. ABA
Vermont Vermont	13	02	Vermont Co-op. ABA Inc.	Minnesota	41	07	Floodwood Co-op. ABA
Mussoshusetts	1.4	02	Pristol Co. Form Burgay Inc. ABA	Minnesota	41 41	20 14	Friendly Valley ABA Land O'Lakes Creameries Inc. ABA
Massachusetts Massachusetts	14	01	Massachusetts ABA Inc.	Minnesota	41	01	*Minnesota Valley ABA
Rhode Island		01	Rhode Island Co-op. ABA Inc.	Minnesota	41 41	02 08	Minnesota Valley and Southern Minnesota AB North Minnesota ABA
				Minnesota	41	21	North St. Louis Co. ABA
Connecticut Connecticut Connecticut Connecticut	16	01 02	Connecticut ABA Inc. Fairfield-New Haven ABA	Minnesota Minnesota	41 41	03 22	Northwest Minnesota ABA Pine Co. ABA
Connecticut	16	03	Litchfield Co. ABA	Minnesota	41	10	Roseau Co. Creameries ABA
		04	*New England Selective ABA	Minnesota Minnesota	41 41	17 18	Southern Minnesota Breeding Federation AB. Swink AB Corp.
New York	21	03	Broome Co-op. ABA Inc. Broome Tioga Co-op. ABA Inc.	Minnesota	41	11	Tilney Farms ABA
New York New York	21 21	02 04	Broome Tioga Co-op. ABA Inc. Cortland ABA Inc.	Minnesota Minnesota	41 41	16 13	Watonwan Truman Co-op. Creamery ABA West St. Louis Co. ABA
New York	21	01	*New York Artificial Breeders Co-op. Inc.		41	12	Willard Co-op. ABA
New York New York	21 21	05 06	Roundout ABA Seneca Co-op. ABA Inc.	Iowa	42	10	Crawford Co. ABA
New York New York New York New York New York New York New York	21	07	Sullivan Co. ABA	Iowa	42	02	*Eastern Iowa ABA Inc.
New Jersev	22	07	Seneca Co-op. ABA Inc. Sullivan Co. ABA Burlington Co. ABA Morris Co. Co-op. ABA Inc. New Jersey Experiment Station ABA *New Jersey Co-op. ABA Inc. Plainsboro ABA *Sussex Co-op. ABA Inc. Walker-Gordon ABA	Iowa Iowa Iowa Iowa	42 42	04 08	Humbolt Co-op. ABA *Iowa Breeders Co-op. ABA
New Jersey New Jersey New Jersey New Jersey New Jersey New Jersey New Jersey	22	04	Morris Co. Co-op. ABA Inc.	Iowa Iowa Iowa Iowa Iowa Iowa	42	0.0	Iowa Dairy Genetics Inc. ABA Linn Co. Co-op. ABA
New Jersey New Jersev	22 22	05 03	*New Jersey Experiment Station ABA *New Jersey Co-op. ABA Inc.	Iowa Iowa	42 42	05 06	North Iowa Co-op. ABA
New Jersey	22	06	Plainsboro ABA	Iowa	42	01	Northwest Iowa Co-op. ABA
New Jersey New Jersev	22 22	01 08	*Sussex Co-op. ABA Inc. Walker-Gordon ABA	Iowa Iowa	42 42	09 07	Palo Alto Co-op. ABA Western Iowa ABA
- constant					4.0		
Pennsylvania Pennsylvania	23 23	03 02	Clarion Co. ABA *First Pennsylvania Co-on ABA	Missouri Missouri	43	09 01	AVA ABA East Missouri ABA
Pennsylvania Pennsylvania Pennsylvania Pennsylvania Pennsylvania	23	06	Clarion Co. ABA *First Pennsylvania Co-op. ABA Golden Genes ABA Inc. *Lehigh Valley Co-op. ABA *NEPA Co-op. ABA	Missouri	43	02	*M. F. A. ABA Mid West ABA
Pennsylvania Pennsylvania	23 23	07 04	*Lehigh Valley Co-op. ABA *NEPA Co-op. ABA	Missouri	43 43	03 04	Mid West ABA Missouri Dairy Breeders ABA
I CHILDY I . CHILL		08	*Lengh Valley Co-op. ABA *NEPA Co-op. ABA *Southeastern Pennsylvania Co-op. ABA *Western Pennsylvania Co-op. ABA Zimperman Pajar, Farm ABA	Missouri	43	08	Osage Farms ABA
Pennsylvania Pennsylvania	23 23	05 01	*Western Pennsylvania Co-op. ABA Zimmerman Dairy Farm ABA	Missouri Missouri	43 43	05 06	Southwest Missouri ABA Trenton ABA
Ohio Ohio	31 31	01 05	*Central Ohio Breeding Association Northeast Ohio Co-op. ABA	South Dakota	46	01	South Dakota Co-op. ABA
Ohio	31	02	*Northern Ohio Breeding Association Inc.	Nebraska	47	09	Central Nebraska Non-stock Co-op. ABA Inc
Ohio Ohio	31 31	06 03	Northwest Ohio ABA Trumbull-Ashtabula ABA	Nebraska Nebraska	47 47	07 03	Dairy Breeders Enterprise ABA Douglas Co-op. ABA
Ohio	31	04	Western Ohio ABA	Nebraska	47	04	Lancaster Non-stock Co-op. Dairy ABA
Indiana	32	12	Bottema Farms ABA	Nebraska Nebraska	47 47	01 05	*Nebraska Dairy Breeders ABA Norfolk Non-stock Co-op. ABA
Indiana	32	03	Elkhart Co. ABA	Nebraska	47	06	University of Nebraska ABA
Indiana Indiana	32 32	04 08	Harrison ABA Harry Rosenbury ABA	Kansas	48	01	*Kansas ABA
Indiana	32 32	05	Indiana ABA				
Indiana Indiana	32	13 06	Indianapolis Co-op. ABA Indiana State Institutions ABA	Delaware Delaware	50 50	01 02	Delaware Co-op. ABA Inc. New Castle Co-op. ABA
Indiana	32	02	*John A. Newman and Sons ABA				
Indiana Indiana	32 32 32	07 16	North Benton-Newton-Jasper ABA	Maryland Maryland	51 51	01 02	Maryland Co-op. ABA Inc. *Maryland-West Virginia Co-op. ABA
Indiana	32	14	LaPorte Co-op. ABA Inc. North Benton-Newton-Jasper ABA Producers Creamery ABA				
Indiana Indiana	32 32	09 18	Ross Farm ABA Southern Indiana ABA	Virginia Virginia Virginia Virginia Virginia	52	08 10	Blue Ridge ABA Inc. Culpeper ABA Inc.
Indiana	32	15	Steuben ABA	Virginia	52	02	Franklin Co. ABA Inc.
Indiana Indiana	32 32	11 10	Topeka ABA Walter H. Ball ABA	Virginia Virginia	52 52	03 06	Loudoun Co. ABA Inc. North Va. Co-op. ABA Inc.
				virginia	32	04	Pulaski Co-op. ABA
Illinois Illinois	33 33	09 04	American Dairy Guernsey ABA Central Illinois ABA	Virginia Virginia	52 52	09 07	Shenandoah Valley ABA Southeast Virginia ABA Inc.
Illinois	33	03	*Curtiss Improved Stud Service Inc.	Virginia	52	05	Valley of Virginia Co-op. ABA Inc.
Illinois Illinois	33 33	05 06	Eastern Stephenson ABA Inter Co. ABA	Virginia	52	01	*Virginia ABA Inc.
Illinois	33 33	01	*Northern Illinois Breeding Co-op.	West Virginia	54	01	West Virginia Co-op. ABA
Illinois Illinois	33 33	07 02	Shelby County ABA *Southern Illinois ABA	North Carolina	55	04	Forsyth Co. ABA
Illinois	33	08	Tri County ABA	North Carolina	55	01	*North Carolina Inst. Breeders ABA
Michigan	34	04	Grand Valley ABA	North Carolina North Carolina	55 55	02 03	North Carolina State College ABA Southeastern ABA
Michigan	34	0.5	Hillsdale ABA		5.0	0.0	
Michigan Michigan	34 34	01 03	*Michigan Co-op. ABA Inc. North Kent ABA	South Carolina South Carolina	56 56	02 01	*Chester Co-op. ABA Clemson College ABA
Michigan	34	02	Zeeland ABA	South Carolina	56	03	South Carolina Co-op. ABA
Wisconsin	35	75	*American Breeders Service	Florida	58	01	Broward County ABA
Wisconsin	35 35	01	*Associated Breeding Service ABA Inc.				
Wisconsin Wisconsin	35 35	02 18	*Badger Co-op. ABA Central Wisconsin Co-op. ABA	Kentucky	61	01	*Kentucky ABA Inc.
Wisconsin	35	20	Clark County ABA	Tennessee	63	01	*East Tennessee ABA
Wisconsin Wisconsin	35 35	07 08	Clinton Stock Farm ABA Inc. Dane Co-op. ABA	Tennessee Tennessee	63 63	04 02	Maury-Williamson ABA Inc. *Tennessee ABA
Wisconsin	35	09	Dane Iowa Co-op. ABA	Tennessee	63	03	*West Tennessee ABA
Wisconsin Wisconsin	35 35	03 19	*East Central Co-op. ABA Langlade Co. ABA	Alabama	64	01	Alabama ABA
Wisconsin	35	04	*Piper Brothers Farm ABA	Alabama	64	02	Marshall Co. ABA
Wisconsin Wisconsin	35 35	10 11	Polk Co. Co-op. ABA Rock Co. ABA				
Wisconsin	35	06	Southern Wisconsin Co-op. ABA				

^{*}Indicates those AB Organizations reported in operation January 1, 1961.

STATE			ORGAN1ZATION	STA	TE		ORGANIZATION
Name	Code	Code	Name	Name	Code	Code	Name
Mississippi	65	01	Hinds Rankin ABA	Arizona	86	01	Arizona ABA
Mississippi	65	08	Noxubee Co. ABA	Arizona	86	02	*Eads ABA
Mississippi	65	06	Mid South ABA	Arizona	86	03	News ABA
Mississippi	65	02	*Mississippi Co-op. ABA				
Mississippi	65	0.3	Pike Co-op. ABA	Utah	87	01	*Cache Valley Co-op. ABA
Mississippi	65	05	South Mississippi Co-op, ABA	Utah	87	02	Weber Co. ABA
Mississippi	65	07	Tippah Co. Fair and Livestock ABA				
Mississippi	65	04	Tupelo ABA	Washington	91	08	Clark Co. ABA
Mississiphi	00	01	Tapelo ADA	Washington	91	02	Colville Valley ABA
Arkansas	71	01	*Arkansas ABA	Washington	91	07	Ed. P. Peterson ABA
ATRAITSAS	11	01	At Kalisas ADA	Washington	91	01	*Evergreen Northwest Breeders ABA Inc
Louisiann	72	01	*Louisiana AB Co-op. Inc.	Washington	91	09	Farwest ABA
Louisiana	72	02			91	03	Mt. Rainier ABA
Louisiana	12	02	Northern Louisiana Jersey ABA	Washington		06	
0)-1	73	01	Frank a Oldahama A DA	Washington	91	05	Northeast Co-op. ABA
Oklahoma			Eastern Oklahoma ABA	Washington	91		Northwest Co-op, ABA
Oklahoma	73 73	02	Northwestern Oklahoma ABA	Washington	91	04	Walla Walla Valley Co-op. ABA
Oklahoma	73	03	Oklahoma Dairy Breeders ABA		0.0	0.0	M N 1 4 T 4
		0.0	0 0 101	Oregon	92	02	Multnomah ABA
Texas	74	09	Cameron Co. ABA	Oregon	92	01	*Oregon Dairy Breeders Association
Texas	74	08	Hill Co. ABA	Oregon	92	03	Yamhill Co. ABA
Texas	74	07	Muenster ABA				
Texas	74	04	North Star ABA	California	93	02	*Adohr Dairy Farms ABA
Texas	74	02	North Texas ABA	California	93	01	*California Dairy ABA
Texas	74	05	Rio Vista ABA	California	93	03	*Excelsior ABA
Texas	74	01	*Texas A & M College ABA	California	93	04	Golden West ABA Inc.
Texas	74	03	Texas Tech ABA	California	93	05	*Jessup Breeders
				California	93	10	*Pacific Breeders Co-op. Inc.
Montana	81	01	Western Montana ABA	California	93	11	Sacramento Co-op. ABA
				California	93	07	San Pasqual ABA Inc.
Idaho	82	01	Bluffview Farm ABA	California	93	06	Santa Clara ABA
ldaho	82	03	New Plymouth ABA	California	93	08	Sonoma Marin Co-op. ABA Inc.
Idaho	82	02	Shamrock ABA	California	93	09	Tulare Co-op. ABA
Iditiio	0.5	02	DIMITITO CR TIDII	Camorina	50	00	rulare co op. mbn
Colorado	84	04	Brookridge Farm Dairy ABA	Puerto Rico	94	01	*Puerto Rico ABA
Colorado	84	01	*Colorado State University ABS	1 40110 11100			1 40110 11100 111011
Colorado	84	02	North Central Colorado ABA	Hawaii	95	03	*Haleakala Dairy Farm ABA
Colorado	84	05	Surface Creek ABA	Hawaii	95	02	Moanalua Dairy Ltd. ABA
Colorado	84	03	Willow Springs ABA	Hawaii	95	01	Waimea Dairy ABA
Colorado	0.4	03	MILLOW SPITHES ADA	Hawall	33	01	Walifica Dally ADA
New Mexico	85	01	New Mexico ABA	Alaska	96	01	*Matanuska Valley ABA
INCW MICKIEU	0.0	01	Hen Meyico undu	Alaska	30	0.1	matanasha vancy ADA

^{*}Indicates those AB organizations reported in operation January 1, 1961.

STATE CODES

16 22 22 33 33 33 33 44 44 45 55 55 55	CONNECTICUT NEW YORK NEW JERSEY PENNSYLVANIA OHIO INDIANA ILLINOIS MICHIGAN WISCONSIN MINESOTA IOWA MISSOURI NORTH DAKOTA SOUTH DAKOTA NEBRASKA KANSAS DELAWARE MARYLAND VIRGINIA WEST VIRGINIA	64 655 71 72 73 74 81 82 83 84 85 86 87 88 91 92 92	ARKÁNŠAS LOUISIANA OKLAHOMA TEXAS MONTANA IDAHO WYOMING COLORADO NEW MEXICO ARIZONA UTAH NEVADA WASHINGTON OREGON CALIFORNIA PUERTO RICO HAWAII

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8Y S1	RE		K	ECORD AV	EKAGE (BY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECORDS		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.				FAT	YEARLY HE RECORDS NO.	MILK	
							AYRS									
50470) 16	34	10476	4.0	414	1948 949 1950 1951 1952	1 2 13 11 7	7750 7695 11114 10475 10369	4.0 4.0 4.0 3.9 3.9	310 301 441 412 407						
5239	4 2	2	7095	4.0	285	1952	2	7095	4.0	285						
5503	3 5	8	8577	4.5	387	1950 1951 1952	4 3 1	8505 8530 5220		410 353 249						
5904	7 3	ţŧ	5630	4.4	241	1950 1951 1952	1 2 1	4480 6690 6580	4.6 4.5 4.0	207 296 262						
5951	5 1	1	8300	3.7	305	1958	1	8300	3.7	305						
6104	6 7	15	8485	14 . 14	369	1949 1951 1952 1953 1954 1955	2 4 2 2 2 2 1	7550 8045 8785 9735 11680 10165 10260	4.4	345 347 372 414 482 420 414	1 2 2 2 2 2	8340 8220 9200 10435 9860 8660	349 350 391 444 422 372	2 2 1	8279 11254 9865	349 475 415
6131	5 ì	4	8218	4.6	381	1948 1951	1	7550 7250	4.6	350 331	ì	8840	373			
						1952 1953	1	8 7 30 9340	4.4	381 460	1	7130 8310	307 359	1	6943	292
6223	3 11	27	8106	4.1	327	1951 1952 1953 1954 1955 1956	3 2 8 2 3 1	6487 6990 8779 8984 10565 9500 11450	4.2 4.0 4.0 4.1 3.9 3.8	270 276 355 362 433 367 433	1 7 8 2 3	8230 7540 8993 9284 10620 9833 11370	355 329 374 388 426 394 451	6 8 2 3 1	7932 8855 11178 10697 11085	369 436
6261	3 7	11	6736	3.8	257	1954 1955 1956 1957	2 4 1	5395 7025 6755 7180	3.9 3.7	214 272 250 284	2 4 4 1	6935 8743 7448 6890	297 356 289 270	2 2 3 1	7886 7559 8349 7205	290 326
6314	4 2	3	9513	4.1	391	1950 1952 1955	1 1 1	10020 10610 8710	4.1	421 438 352	1	10790	447			
6314	7 43	70	9382	4.1	382	1954 1955 1956 1957 1958 1959	9 7 13 12 12 16	9150 8127 9412 9258 10578 9511 5410	4.0 3.9	382 344 377 366 424 387 221	8 7 13 12 11	8774 8433 9153 8312 8679 9600	350 336 361 348 343 385	7 6 7 9 11 15	6111 8709 9053 8396 9259 9846 10704	360 369 33 7
6342	6 7	9	8841	4.2	367	1952 1953 1954 1955 1958 1959	1 3 2 1	9550 8180 10047 8645 5690 8660	4.4 4.1	392 358 415 375 243 340	1 3 2 1	8910 9100 7770 8160 7000	402 393 371 402 280	1 3 2 1	9592 8371 8660 8230 7685	3d5 366 407 385 301
6488	5 6	10	6457	4.1	262	1951 1952 1953 1954	3 4 2 1	6700 7620 9205 11950	3.9 4.0	273 298 372 508	1 1 1 1	6940 7990 9500 9520	306 328 403 390	1	8284 9581	
6559	9					1951	1	6880	4.6	314						
6757	6 4	12	6671	4.5	298	1949 1950 1951 1952 1953 1954	3 3 2 2 1 1	7350 7670 6810 7580 9050 7100	4.4 4.0 4.1	329 341 299 304 373 297	1	7960 9210	344 389	;	6943 8295	292 363
6818	8 1	1	8590	4.2	361	1951	1	8590	4.2	361						
7025	9 6	16	8213	4.2	341	1954 1955 1956 1957 1958 1959	4 3 3 2 2 2	7803 9183 8753 10460 10185 11295	4.1 4.2 4.0 4.3	329 376 373 416 431 453	4 3 3 2 1 2	8773 7310 9030 9775 8870 10940	352 289 360 399 353 448	4 2 2 2 1 2	8870 8148 9985 10263 9777 10917	323 401 411 396
7036	8 2	5	8812	4.4	381	1953	1	7 890	4.8	37 9						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	SIKE NO.	DAUGHTERS NO.	KECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-0AY RECOROS NO.			YEARLY HI RECORDS NO.	MILK	
1 1000							1955			4.0	414	1	10050	406		8502	338
1986 1996 1 6520 2 2 2 2 2 2 2 2 2							1956		10080	3.7		1			1		
1933 3 7203 4.0 500 2 715 518 2 646 500 64								ł									
1955 3 7750 3	7076	0 10	20	8237	4.1	338	1953	3	7623	4.0	304						
1996 1998 3 1080 4-1 1570 1 10070 4-2 1 10850 4-5							1955		7750	3.9	312	3	7867	314	1	9865	415
71191																	
1951 1 8140 3.5 297 1 1500 310 1 1700 310 1 1700 310 1 1700 310 1 1700 310 310 1 1700 310															2	11260	457
1952 2	7119	1 4	8	7327	4.0	286											
195							1952	2	6470	4.0	250	,	7350	316	1	7706	336
1951 2 2 2 2 2 2 2 2 2																	
1963	7170	3 7	19	8052	4.2	342	1951	2	5385	3.9	211						
1955							1953	1	7639	4.5	338	6	8230	339			
19-77							1955	1	6830	3.8	257	1	7530	289	1	7794	307
1953 5 9618 4,2 410 3 9043 385 3 7386 310 310							1957	1	8410	3.7	315	1	77/0	298	1	8458	3≥5
1955	7329	3 14	26	8581	4.2	360									7	7704	710
1956 3 7253 4 0 295 2 8015 346 2 7494 334 1 7202 295 1 396 2 2060 384 1 7202 295 1 396 2 396 3 3 1 7202 295 1 396 2 396 3 1 1 1 1 1 1 1 1 1							1954	4	9845	4.5	443	3	9217	397	3	10170	436
1958 1 13990 4.3 608 1 12550 533 1 10344 433 1759 1 14600 4.7 600 1 7040 404 1 10344 433 174021 25							1956	3	7253	4.0	295	2	8015	346	2	7494	334
74021 25							1958	1	13990	4.3	806	1	12550	533			
1956 6 9112 4.1 372 5 1098 432 4 9900 392 394 394 394 394 395 394 395							1960		10320	3.5	364	1	9900	389	1	10889	431
1958	7402	1 25	40	9156	4.2	379	1956	6	9112	4 - 1	372	5	10958	432	ų	9900	392
1960 3 10227 4.0 408 3 10280 393 3 10653 416							1958	9	8039	4.3	340	5	9480	393	5	-9293	386
1955																	
1957	7661	3 8	10	11427	3.9	451											
1959 2 17810 3.8 689 2 8845 347 2 9619 378							1957						8850				
1951																	
1952 1 9186	7683	1 1	6	10590	4.2	446		1 1									
78114 9 17 8078 4.1 329 1955 3 9773 4.2 409 3 11167 448 3 10104 413 1956 3 10667 4.2 448 3 10733 475 3 10635 435 1957 3 10493 3.8 393 3 11017 459 3 11107 461 1959 3 8957 3.9 348 3 9407 389 3 9665 397 1960 1 7430 4.0 295 1 10260 398 80.379 7 8 8077 4.2 341 1957 2 9860 4.0 295 1 10260 398 80.379 8 8077 4.2 341 1957 2 9860 4.0 295 1 10260 398 80.379 8 8077 4.2 341 1957 2 9860 4.0 401 2 10670 432 2 11571 464 818 3 1959 2 9710 4.4 430 2 8165 382 2 10012 426 826 8 10 18 8634 4.1 347 1954 1 8130 4.4 356 1 7550 312 1 10039 426 82628 10 18 8634 4.1 347 1954 1 8130 4.4 356 1 7550 312 1 10039 426 82628 10 18 8634 4.1 347 1954 1 8160 4.2 359 1 10510 420 1 9265 380 1959 2 10670 4.3 305 5 8812 2 10012 426 826 8 10 18 8634 4.1 347 1954 1 8160 4.2 359 1 10510 420 1 9265 380 1959 2 10670 4.3 305 5 8812 2 10014 4.5 366 1 7550 312 1 10039 426 826 8 10 18 8634 4.1 347 1954 1 8460 4.2 359 1 10510 420 1 9265 380 1959 2 10670 4.1 363 5 9158 354 5 9324 364 1959 2 10670 4.1 363 5 9158 354 5 9324 364 1959 2 10670 4.1 363 5 9158 354 5 9324 364 1959 2 10670 4.1 363 5 9158 354 5 9324 364 1959 2 10670 4.1 363 5 9158 354 5 9324 364 1959 2 10670 4.1 363 5 9158 354 5 9324 364 1959 1958 3 808 3 8172 319 1958 8 8714 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 348 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 348 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 348 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 10							1952		9180	4.1	380	1	7060	296	1	6943	292
1956 3 10667 4.2 448 3 10733 475 3 10655 435 1957 3 10493 3.8 393 3 11017 459 3 11107 451 454 455 451 45																	
1957 3 10493 3.8 393 3 11017 459 3 11107 461 1958 4 8250 4.0 323 4 9305 372 4 9459 382 1959 3 8957 3.9 348 3 9407 389 3 9665 397 3 1960 1 7430 4.0 295 1 10260 398 3 9665 397 3 1960 1 7430 4.0 295 1 10260 398 3 9665 397 3 1960 1 7430 4.0 295 1 10260 398 3 9665 397 3 1967 366 3 1969 3 1969 3 9665 397 3 1969 3 196	7811	4 9	17	8078	4.1	329											
1959 3 8957 3.9 348 3 9407 389 3 9665 397							1957	3	10493	3.8	393	3	11017	459	3	11107	461
1958							1959	3	8957	3.9	348		9407	389	3		
82628 10 18 8634 4.1 347 1954 1 8460 4.2 359 1 10510 420 1 9265 380 1956 5 8812 3.9 349 5 8096 354 2 9527 381 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1950 1 9560 2 88785 4.3 317 2 319 8888 386 4 8717 349 1958 8 8714 4.2 362 7 9537 394 4 8818 344 8818 3959 1 10 14 8536 4.1 345 1955 3 8545 4.3 377 2 11305 432 2 11053 438 86898 10 14 8536 4.1 345 1955 3 8545 4.3 377 2 11305 432 2 11053 438	8037	9 1	8	8077	4.2	34 I											
82628 10 18 8634 4.1 347 1954 1 8460 4.2 359 1 10510 420 1 9265 380 1956 5 8812 3.9 349 5 8096 336 2 9527 381 1957 2 10625 4.0 409 2 8625 361 1958 7 8970 4.1 363 5 9158 354 5 9224 364 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1960 1 97580 4.3 410 1 10760 468 1 10704 461 1960 1 97580 4.3 410 1 10760 468 1 10704 461 1957 6 8625 4.3 381 6 9358 386 4 8747 349 1958 8 8714 4.2 362 7 9537 394 4 8818 344 8817 1958 8 8714 4.2 362 7 9537 394 4 8818 344 8818 3817 1959 10 9081 4.2 383 10 9323 386 10 9243 385 1960 2 8785 4.3 377 2 11305 432 2 11053 438 8688 10 14 8536 4.1 345 1955 3 8543 4.1 348 3 9167 366 3 8698 354 1956 3 7550 4.2 315 3 8083 328 2 10579 408																	
1956 5 8812 3.9 349 5 8096 3366 2 9527 381 1957 2 10215 4.0 409 2 8625 361 1958 7 8970 4.1 363 5 9158 354 5 9324 364 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1960 1 9580 4.3 410 1 10760 468 1 10704 468 86390 19 30 8710 4.3 374 1956 4 8990 4.6 412 4 9785 384 3 8172 319 1957 6 8625 4.4 381 6 9358 386 4 8747 349 1958 8 8714 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 363 10 9323 386 10 9243 386 10 14 8536 4.1 345 1955 3 8543 4.1 348 3 9167 366 3 8698 354 86898 10 14 8536 4.1 345 1955 3 8543 4.1 348 3 9167 366 3 8698 354 1956 3 7550 4.2 315 3 8083 328 2 10579 408 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 3792 378 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 1957 3 8310 4.3 346 3 9070 335 3 9392 379 37	8252	0 3	3	7163	4.0	284											
1957 2 10215 4.0 409 2 8625 361 1958 7 8970 4.1 363 5 9158 354 5 9424 364 1959 2 10870 3.9 421 2 11225 472 1 11347 456 1960 1 9580 4.3 410 1 10760 468 1 10704 461 86390 19 30 8710 4.3 374 1956 4 8990 4.6 412 4 9785 384 3 8172 319 1957 6 8625 4.4 381 6 9358 386 4 8747 349 1958 8 8714 4.2 362 7 9537 394 4 8818 349 1959 10 9081 4.2 383 10 9323 386 10 9243 385 1960 2 8785 4.3 377 2 11305 432 2 11053 438 86898 10 14 8536 4.1 345 1955 3 8543 4.1 348 3 9167 366 3 8088 328 2 10579 408 1956 3 7550 4.2 315 3 8083 328 2 10579 408 1957 3 8310 4.3 346 3 9070 335 3 9392 379 3792 379	8262	8 10	18	8634	4.1	347		•					10510 8096		-		
1959 2 10870 3.9 4.21 2 11225 472 1 11347 456 86390 19 30 8710 4.3 374 1956 4 8990 4.6 412 4 9785 384 3 8172 319 86390 19 30 8710 4.3 374 1956 4 8990 4.6 412 4 9785 384 3 8172 319 1957 6 8625 4.4 381 6 9358 386 4 8747 349 1958 8 8714 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 363 10 9233 386 10 9233 386 10 14 8536 4.1 345 1956 2 8785 4.3 377 2 11305 432 2 11053 438 86898 10 14 8536 4.1 345 1955 3 8543 4.1 346 3 9167 366 3 8698 354 1957 3 8310 4.3 345 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 1957 3 8310 4.3 346 3 9070 335 3 9392 375 3							1957	2	10215	4.0	409	2	8625	36 I			
1957 6 8625 4.4 381 6 9358 386 4 8747 349 1958 8 8714 4.2 362 7 9537 394 4 8818 344 1959 10 9081 4.2 383 10 9323 386 10 9243 385 1960 2 8785 4.3 377 2 11305 432 2 11053 438 86898 10 14 8536 4.1 345 1955 3 8543 4.1 348 3 9167 366 3 8698 354 1956 3 7550 4.2 315 3 8083 328 2 10579 408 1957 3 8310 4.3 346 3 9070 335 3 9392 3792 379 1957 3 8310 4.3 346 3 9070 335 3 9392 3792							1959		10870	3.9	421	2	11225	472	1	11347	456
1958 8 8714 4 2 362 7 9537 394 4 8818 344 1959 10 9081 4 2 383 10 923 386 10 9243 385 1960 2 8785 4 3 377 2 11305 432 2 11053 438 86898 10 14 8536 4 1 345 1955 3 8543 4 1 346 3 9167 366 3 8698 354 1956 3 7550 4 2 315 3 8083 328 2 10579 408 1957 3 8310 4 3 346 3 9070 335 3 9392 379 1957 3 8310 4 3 346 3 9070 335 3 9392 379 1957 3 8310 4 3 346 3 9070 335 3 9392 379 1957 3 8310 4 3 346 3 9070 335 3 9392 379 1958 10 14 15 15 15 15 15 15 15	8639	0 19	30	8710	4.3	374											
86898 10 14 8536 4-1 345 1955 3 8543 4-1 346 3 9167 366 3 8698 354 1956 3 7550 4-2 315 3 8083 328 2 10579 408 1957 3 8310 4-3 346 3 9070 335 3 9392 379							1958	ઇ	8714	4.2	362	7	9537	394	4	8818	344
1956 3 7550 4.2 315 3 8083 328 2 10579 408 1957 3 8310 4.3 346 3 9070 335 3 9392 379																	
1957 3 8310 4.3 346 3 9070 335 3 9392 379 1958 2 9590 4.1 384 1 10860 441 1 11827 473	8689	8 10	14	8536	4.1	345	1956	3	7550	4.2	315	3	8083	328	2	10579	408
																9392 11827	379 473

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELGING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY SIRE BY SIRE THE PROPERTY OF THE PROPERTY O

	DAUGHTERS				FAI	FRESH	KECURDS		TEST	FAT	RECURDS	MILK	FAT	YEARLY HE	MILK	FAT
NU.	140 -	v0.	Lb.	PCT.	LB.	YEAR	140 =	L8.	PCT.	LB.	4U.	Lt.	LB.	140 *	LS.	Lu.
							AYRS	HIR.								
						1959	3		3.9	347	3	10623	420	2	11347	456
91333	6	6	9978	4.4	432	1959	Į.	9663	4.4	430	4	9948	395	4	9535	341
						1960	2	10310	4.2	434	2	10300	390	2	11598	469
94423	. 4	4	8090	4.2	336	1958	1	11160	4.3	460	1	10270	436			
						1959	2	6825	4.2	282	2	8365	353	2	9619	397
						1960	1	755u	4.1	312	1	7400	410	1	9995	434
95304	16	1.7	8854	4.3	380	1958	,	6815	4.1	274						
						1959	1.0	9310	4.2	392	10	9351	384	10	9638	390
						1960	5	9002	4.	406	5	9072	418	4	9950	425
10,607	3	3	8060	4.5	361	1956	1	7770	4.5	335	1	9540	394			
						1960	2		4.0	574	2	8155	329	2	10279	437
106646	1	1	7050	3.6	256	1900	1	7050	3.6	256	1	6140	238	1	0524	319

TABLE 15.--OAUGHTE -AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING CREAMIZATED S--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

DAUGHTEK AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR																
SIKE NO.	DAUGHTERS NO.	KECDRDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECURDS NO.			FAT	305-DAY C RECORDS NO.		FAT	YLARLY HE RECOROS AD.		FAT
							GUERA	SEY								
17 12 00) 6	16	6129	5.2	311	1947 1949 1950 1951 1952 1953 1954	10 1 1 1 1	6648 8440 8270 8330 5050 7380 6170	5.3 5.5 5.5 5.9 5.9 5.0 5.7	343 460 453 490 298 415 354	1 1 1	7780 7380 7980 7230	451 400 451 365	1	7510	400
198600) 4	17	5804	5.2	297	1947 1948 1949 1950 1951 1953	7 3 2 3 1	5831 6617 5680 7113 6690 5790	5.1 4.9 5.0 5.1 4.7 5.1	294 321 331 359 318 294						
200363	5 5	8	7007	4.7	325	1947 1948 1949 1950	5 1 1	8518 11440 9680 7590	4.6 4.7 4.4 4.7	301 337 429 354						
23/161		12	7912	5.0	392	1949 1950 1951 1952 1953 1954 1955	1 1 2 2 2 1 1 2	7750 7780 7955 8010 8115 9680 7630 7045	4.7 4.7 4.8 5.0 5.0 5.1 5.4 5.0	360 362 361 596 400 493 413 348	1 1 1 1 1 1 2	7210 6960 7040 7440 7470 9050 8990 8955	380 317 328 367 358 452 437 420	 	8121 9854 9396 9243	391 471 439 449
245152	? 7	15	8018	4.7	377	1947 1949 1951 1952 1953 1954 1955 1956	4 1 2 1 3 1 1 1	8093 10200 9285 5070 7263 9720 9720 6570 6900	4.59 4.59 4.60 4.60 4.9 4.9 4.9 4.9	386 459 449 230 333 456 473 320 315		8120 6550 8420 7740 9310	396 314 400 350 449	1	7314	360
246126	5 11	34	7 270	5.1	366	1947 1948 1949 1950 1951 1952 1953	18 6 3 2 1 2 2	6871 7037 9063 7680 6060 8295 5720	5.2 4.9 4.6 5.1 5.7 5.1	357 343 400 387 345 417 287						
250883	3 20	50	7466	5.0	370	1947 1948 1949 1950 1951 1952 1953 1954	5 7 8 7 4 5 3	7588 9392 8804 7760 7365 7179 6125 6964 8347	4.9 4.9 4.8 5.2 5.0 5.0 4.0 5.0 4.9	377 453 421 406 367 359 291 350 410	4 5 3 5 3	8095 7314 7573 7620 8933	388 366 430	3 3 3	7750 7441 8491	359 348 403
251361	7 7	17	8076	4.7	378	1947 1948 1949 1950 1951 1952	6 2 3 3 2	8102 7560 7900 8700 7530 7840	4.9 4.7 4.6 4.4 4.6	388 357 363 383 344 331						
251484	15	37	7244	5.2	371	1947 1948 1949 1950 1951	27 3 3 3 1	7034 6687 7817 6380 5560	5.2 5.4 5.3 5.0 3.6	361 359 415 318 210						
253212	2 2	2	7785	4.6	357	1947	2	7785	4.6	357						
258935	o 1	4	8940	5.1	456	1950 1951 1952 1953	 	9910	5.1 5.2 5.0 5.1	496 427 492 409	 	9610 9540 11210 8750	424 413 457 386	1	7563	389
262046	5 3	14	9869	4.6	¥55	1947 1949 1950 1951 1952 1953	1 2 2 3 2 3 1	9180 11243 10550	4.6	362 360 467 535 480 424 286	}	8700 6650 7860 8470	365 326 325 379	i 1	9221 5352	
26252	1 12	32	7237	5.1	367	1949 1950 1951 1952 1953 1954 1955	1 3 7 6 5 4 5	8780 7333 7316 7573 6954 8113	4.9	433 415 387 376 373 407	1 2 5 4 14 3	9650 8935 7814 8485 7900 9497 8200	460 430 381 408 390 465	4 2 3	8450 7489 8680	417 364

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

	0															
SIKE NÚ.	OAUGHTERS NU.	RECUROS NO.		TEST PCT.	FAI L8.	FRESH YEAR	RECORDS NO-		TEST PCT.	FAT LB.	RECORDS			YLARLY HE RECORUS NO.	MILK	
						1956	oUERN 1	4280	4.1	177	1	8900	374	1	7804	3/3
2627	92 45	127	7600	4.8	362	1947 1948 1949 1950 1951 1952 1953 1954 1955	46 20 17 15 7 11 3 4 3	7341 7715 7681 8269 7816 8554 8283 8333 8747 6200	4.0 5.0 4.0 4.5 4.8 4.8 5.0 4.9	362 370 379 383 373 382 398 404 433 398	1 1 1 4 3 2 3 4 3	7980 8770 7370 9138 7280 9045 8453 8920 8873	420 404 3/1 466 364 452 422 430 450 465	3 3 3	5230 7361 8695 9341	415 363 445 494
2640	70 39	97	6936	4.8	335	1947 1948 1949 1950 1951 1952 1953 1954 1955	41 13 11 10 8 7 3 2 1	6898 7632 7465 6899 7036 7704 7287 7795 6620 8850	4.9 5.0 4.9 4.9 4.9 4.8 4.6 4.6	338 381 370 338 339 372 352 355 320 407	1 1 2 2 2 2 1	10100 8560 7530 6880 7355 7110 3560	445 384 391 341 351 355 420	2 2 1 1	7789 7614 7804 8121	375 366 371 402
2731.	36 114	292	7512	4.9	3/0	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 26 30 44 59 45 28 21 17 12	8188 7621 7746 7799 7719 7487 8185 8025 8792 8459 8508	5.2 4.9 4.8 4.9 5.0 5.0 4.9	421 368 375 378 376 362 410 394 426 410 401	2 14 18 38 57 44 26 21 14 10	6960 8237 8059 8012 7740 7916 8572 8843 8839 8988 6660	363 387 388 381 362 365 398 410 403 420 434	28 54 41 24 20 14 9	8051 7842 8023 8810 8571 9113 9064 9900	387 370 372 409 401 421 418 478
2757	97 7	15	7033	4.8	342	1950 1951 1952 1953 1954	3 4 3 3 2	8393 7073 6473 6310 5940	5.0 4.9 5.2 4.9 4.8	424 346 334 308 287	2 2 2	67o5 7550 7655	331 364 358	2 2	7614 7669	
2755	97 12	39	6984	5.0	350	1947 1948 1949 1950 1951 1952 1953 1954	4 8 5 7 3 4 2 2 2	5985 7001 7604 7347 7456 7785 8100 7795 8160	4.9 4.8 5.0 5.1 5.2 4.9 4.8 4.7	294 345 368 368 380 400 394 374 384	2 1 1 2 2 2 2	9820 7980 8220 8480 7670 8040 8330	483 379 391 407 352 379 385	2 2 2	8590 8197 8998	396 386 420
2762	83 1	2	8445	5.1	427	1955 1956	1	9480 7410	5.0 5.2	470 384	1	8540 8730	412 435	1	9385 8960	457
2806	91 6	24	7693	4.5	348	1947 1948 1949 1950 1951 1952 1953 1954 1955	1 2 2 5 2 3 4 2 2 1	3650 7140 10735 7638 8005 7173 7788 8775 7695 7730	4.6 4.7 4.5 4.7 4.6 4.5 4.4 4.3 4.3	412 336 488 351 371 323 340 367 329 341	1 1 2 2 3 4 2 2	9920 9550 8565 8530 8613 8338 7835 7460 8010	410 400 422 413 400 403 358 351 378	3 1 2 1	77/9 7761 8203 7685	365 372 342 365
2823	25 53	127	7022	4.9	342	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	61 13 11 15 9 7 4 2 2 1	7080 6799 7335 7041 8292 7599 9433 11865 10120 7370 6645		342 332 350 345 402 373 459 541 475 308 300	2 1 1 2 2 1 1	8865 10300 7290 8750 10285 8960 9010 10020	412 397 376 405 455 458 474 509	2 2 2 1 2	8966 9260 10459 9341 11173	408 426 473 494 504
2881	61 1	1	6470	6.2	400	1951	1	6470	6.2	400						
2895	35 149	321	7045	4.9	346	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	8 36 60 75 65 37 18 9	7514 7098 7269 7140 6746 7491 7683 8302 6866 9632	4.9 5.0 5.0 4.9 4.9 4.9 4.8 4.8	364 349 363 355 330 370 379 399 325 447	2 11 22 59 61 36 18 8	9065 7316 8406 8253 8338 8552 8927 9700 9077 9646	456 384 406 384 378 401 410 471 426 447	40 54 35 17 7 6 5	8625 7870 8605 8717 8985 8591 10039	407 376 413 415 439 409 459

	OAUGHTER	AVERAGE	BY SI	RE		R	ECORD AVE	RAGE	EY SIK	E BY	FRESHLNING	YLAR				
IRL E	DAUGHTERS NO.	RECORDS		TLST PCT.	FAT LB.	FRESH YEAR	RECURDS NO.		TEST PCT.	FAT LB.	305-DAY I RECORDS NO.		FAT LB.	YEARLY HI KLCORUS NO.		
						1960	GULRA 2	ISEY 12245	4.8	578	2	10100	481	2	11015	536
90089	4	15	7977	4.8	381	1947 1948 1949 1950 1951	10 1 1 1 1	8513 10050 9970 7590 10150 8720	4.9 5.0 4.9 4.7 4.5	419 561 490 355 461 401						
94933	16	52	7306	4.9	356	1947 1948 1949 1950 1951 1952 1953	19 10 8 6 5 2 1	7261 7527 8091 7833 8166 7865 7380 8510	4.9 5.1 4.8 4.5 4.6 4.9 5.1 5.0	350 381 385 354 371 377 373 424	1 1 1 1	9170 8660 10000 7330 6810 6730	405 439 495 348 338 333	1	7663 7445	3 7 :
99206	55	132	6966	4.9	338	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	22 24 25 21 11 12 6 4 5	6523 6839 7489 6873 6641 7313 6585 6115 8078 9540	5.0 5.0 4.8 4.7	312 332 374 340 330 363 325 292 376 441 586	2 3 4 2 6 9 4 2	8975 8273 8593 8235 8375 7863 6870 8110 10000 10000	408 403 404 373 386 366 314 380 485 496	6 3 5 1	7995 744 8184 10747 9865	371 34 37 53 488
06969	2	5	7659	4.9	363	1947 1948 1949 1951 1952	1 1 1 1	5720 11840 6240 8720 11590	5.1 4.7 5.0 4.4 4.1	292 553 313 386 479						
09691	5	10	6062	4.7	264	1947 1948 1949 1950 1951 1952	3 1 2 2 1 1	6117 4850 6615 5905 4430 6970	5.3 4.9 4.7 4.9	282 256 320 273 216 337						
12690	1	3	7923	5.2	412	1953 1954 1955	 	7030 7910 8830	5.3	351 416 468	1 1 1	7430 8620 8830	370 417 446]]]	8077 7685 8622	40 38 42
12969	14	38	6511	4.9	317	1947 1948 1949 1950 1951 1952 1953 1954	8 8 5 3 3 1	6603 7544 7058 7134 7900 7627 8530 7670	4.8 4.5	317 372 353 327 374 361 387 296	1	8270	354	ı	7477	33
						1956	1	5910	3.9	230	1	10170	425	ı	n622	36
132 79 19639	1	1 278	6610 7591		34 <i>9</i> 384	1950	1	7750		349 394	-1	76.00	40 /			
. 70 37	121	210	7371	2+1	4 0.5	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 38 61 62 44 28 16 12 11	7752 7450 7245 7657 7597 8028 8632 8912 9766 9990	5.1 5.1 5.1 5.0 4.9 4.8 4.8	379 367 391 390 403 419 428 470 524	2 26 50 59 43 28 16 10	7600 8450 8231 8441 3367 3119 9029 8619 3720	386 385 392 399 393 430 432 413 400 457	44 51 38 23 16 10 8	8388 8429 8504 8884 8469 8777 9772	40 43 41 42 42
2∠295	15	35	7404	4.9	354	1949 1950 1951 1952 1953 1954 1955	5 7 4 6 6	7572 6946 6665 8353 7943 7618 8170 7580	4.9 5.1 4.7 4.8 4.9 4.7	345 342 340 397 383 372 382 373	1 2 4 6 0	9140 3025 9298 7872 7958 8160 9560	515 357 412 389 383 396 454	6 6 2	8588 8213 8758 9527	36

7074 6921 6939 4.9 4.1 4.8 4.9

7179

6930

7870

14520 4.6

Ó

100

57

427

4.5 4.6 4.7 4.8 5.1

5.3 5.1 5.1 5.0 5.0 5.0 400 398 404

6656 4.8 317

1 14520 4.6

8091 5.0

- 1

33∠819

9225

10 5

411

447

380

443

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BALEU.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

10

DAUGHTER AVERAGE 8Y SIRE

SIKL NO-	DAUGHTERS	KECOKDS		ICST PCT.	FAI LB.	FRESH YEAR	RECURÚS NO.	MILK LB.	TEST PCT.	FAT Lô.	305-DAY (RECURDS			YLARLY HE RECORDS NO.	MILK	
						1958 1959 1960	56 57 10	8453 9200 1049o	5.0 5.0 4.9	424 456 514	4 ś 5 u 9	8993 8961 10294	427 422 457	42 44 2	9163 9281 10797	438 438 460
33 o4 4	2 6	25	7556	5.4	405	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	6 3 3 4 5 2 1	6525 7405 9643 8663 10230 9673 6790 7380 9670 10470	5.2 5.5 5.4 5.3 4.7 5.1 5.1 5.0 4.9 5.1	537 404 515 461 476 495 344 364 478 535	1 1 1 2 2 2 2 2 1	7660 8820 7960 6520 8975 7790 7720 10330 10020	452 358 352 40 + 415 371 337 498 482	2 2 2 1	8697 8448 8502 9429 7293	400 377 334 447 444
33075	5 51	157	7365	4.8	351	1948 1949 1950 1951 1952 1953 1954 1955 1956	3 8 21 35 28 25 20 11 6 2	6227 8574 7576 7834 7135 7405 7460 7485 7448 5725	4.4 4.7 4.6 4.9 4.9 4.0 4.0 4.0 4.0	274 417 364 381 347 357 354 362 354 266	3 6 14 15 16 20 11 6 2	8870 7970 7764 8015 7788 7813 8376 6513 5615	381 405 380 390 383 379 393 416 299	15 19 10 6	7890 7800 8681 8297 7096	3e3 3m3 407 405 3o2
33711	8 8	17	8311	4.5	3/3	1950 1951 1952 1953 1954 1955 1956	2 2 3 2 3 2 1	8425 9990 7820 7267 8925 9127 8720 7920	4.4 4.7 4.3 4.1 4.3 4.6 4.7	368 467 329 316 419 397 401 370	1 2 2 3 1	12020 10100 11280 11730 12340 12090	452 408 462 465 495 501	2 2 3 1	8851 9712 11783 13102 14584	3/0 4/3 444 4/3 564
3385 6	1 74	162	7350	+ = 6	341	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1950 1959	1 19 15 13 23 25 20 11	6550 7716 6637 8363 7610 7813 8051 7697 8002 9190 7515	5.6 4.7 4.6 4.0 4.7 4.5 4.7 4.5 4.7	567 563 302 379 545 556 579 349 370 384 426 354	2 2 4 13 20 20 20 19 11	7355 7445 8163 7582 8553 8513 8318 8930 9060 9255 9530	377 362 410 383 412 416 392 436 444 457	16 23 19 10 4 2 2	8273 8675 8772 9300 8796 9380 8393	377 475 415 457 453 463 417
35211	0 11	54	8043	5.0	400	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 5 6 5 4 3 4 3 2 1	4460 7656 8580 7638 8356 3750 8325 12207 12315 9930	4.0 5.1 5.2 5.1 5.2 5.0 4.0 4.7 4.2	207 399 448 306 426 503 399 501 413	1 2 3 2 3 4 3 2 1	3530 8320 7623 7550 7517 7953 8523 6500 10000	423 385 371 373 388 404 453 422 492	2 3 3 2 1	84 16 7242 8509 9200 9865	421 376 411 403 488
35222	6 8Ù	230	7756	5•2	394	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	14 24 30 37 31 29 10 15 11		5.2 5.1 5.3 5.4 5.7 5.1 5.2 5.2 5.4		4 16 20 31 31 24 10 15 9	7950 8180 8174 8146 8605 8673 8673 9043 9703 8657 8403		24 27 24 10 14 9	8126 8588 8664 8510 8951 9189 8875 8807	
353 20	b 2	3	6623	4.7	314	1950 1951 1952	1 1 1	5280	4 - 6 4 - 6 4 - 0		1	8950 7510	456 370			
35478	8 I7U	∴∠ 4	71/5	4.9	353	1952 1953 1954 1955 1956 1957 1958 1959 1960	11 32 68 75 60 36 18 13	6446 7670 7386 7344 7622 7171 7967 7215 7828	5.1. 4.9 4.5 4.8	321 374 369 367 375 351 379 344 345	5 23 66 75 63 74 17 11	75/4 8386 8651 9200 9703 8680 8638 7650	403 421 443 391 392	20 59 55 55 27 16	8158 8179 8577 8794 9055 9025 9034	376 403 407 410 410
0000	2 1	3	687u	4 - 1	262	1950 1951 1952	1 1 1	7640 6100 6670	4.0 4.2 4.1	257 254						
35430	3 37	32	8691	4.3	330	1949 1950 1951 1952 1953	10 21 15 14 5	842 c 8295 7892 8355 9062	4.1	369 405	5 5 7	8513 7645 8154 8450 8660	377 399 414	6	8 52 °	467

TABLE 15.--DAUGHTEK-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING CROADLETICHS--GROUPED BY BREED,
BY YEAR OF FRESHENING-RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIKE

SIKI. NO.	DAUGHTERS NO.	кьсокр ₂		TLST PCT.		FRESH YEAR	WG. KTCOKD2		TEST PCT.	FAI LD.	305-DAY RECUROS 70.	MILK		YEARLY H RECORDS NO.		FIT
						1954 1955 1956 1957 1959	5∪≳κα 8 4 1 1	45EY 4584 7498 10710 7740 7950	4.6 4.4 4.5 4.7 5.6	394 331 313 458 396	0 4 1 1	7423 7348 8000 9140 9000	368 362 447 460 427	8 4 1 1	7813 7991 8971 8775 9374	373 379 404 403 407
36 35 4	5 19	47	7269	4.7	33 8	1949 1950 1951 1952 1953 1954 1955 1956	1 5 8 11 6 4 0 2 2	6850 8360 7895 6611 6440 7945 8080 9050 8080	4.4 4.8 4.7 4.6 4.4 4.5 4.7	391 400 368 312 299 347 356 421 371	3 3 8 4 6 2 2	10373 8457 8575 6115 8095 9645 9595 9 90	474 365 383 378 392 437 400 435	7 14 14 2 2	8200 8167 9134 6617 9402	377 570 416 364 414
36545	7 i	3	8137	o.c	404	1953 1954 1955]]]	9120 9210 6080	5.1 5.1 4.8	461 472 295	1	8 100 8420	445 42/	1	9309	47)
361,8	ċ 4	9	6753	o•1	341	1950 1951 1752 1753 1954 1955	1 2 1 2 4	6380 7170 5370 7685 6410 7500	5.3 5.1 5.3 4.9 4.6	339 364 283 371 296 344	1 2 2 1	10026 8525 7755 12050	361 353 326 456	2 2	10097 8546 10889	411 54: 40)
5789 <i>1</i>	8 ld	61	7 23u	»·1	364	1950 1951 1952 1953 1954 1955 1956 1957	7 11 14 10 7 3 4 5	7649 6917 7185 7555 7950 8330 7630 8877	4.9 5.3 5.0 4.0 4.6 4.9 4.0	581 554 576 575 564 408 562 454 445	1 5 7 5 7 2 4 3	8270 6500 7244 7058 7734 8640 8743 8630 9205	396 403 346 368 377 305 403 402 418	6 0 3 3 3	7436 7774 6542 7659 8720 8662	306 337 364 411 412
37a9a	Se 0	1 ₂ y	7215	4.7	334	1949 1950 1951 1952 1953 1954 1955 1956 1957	3 13 29 23 19 17 11 6 3 2	8647 7794 6877 7127 7886 7532 6759 7317 7667 8420	4.4 4.9 4.0 4.0 4.0 4.0 4.0 4.1	395 345 347 305 300 300 347 359 346	5 14 10 14 10 5 2	8677 8244 8366 8237 8338 8413 8148 9255	306 379 381 381 383 370 372 445 343	10 11 1e 5 2	041 0146 000 i 0774 0721 035	37 ; 37 ; 47 ; 47 ; 37 ;
38548	5 143	261	7845	4.8	377	1954 1955 1956 1957 1958 1959 1960	24 08 36 30 31	6639 6946 8016 8904 9055 8543	4.0 4.0 4.7 4.8 4.6 4.7 4.7	320 334 387 425 430 402 458	73 57 63 34 28 29 5	80 50 8621 9224 9251 9419 8858 8986	375 420 445 437 415	21 48 58 33 27 25	7817 8341 9127 9206 9618 9405 9663	300 300 473 437 451 456 454
38730	1 31	36	7844	4.9	383	1956 1957 1958 1959 1960	7 10 10 10	743 8320 7217 8604 7496	4.7 5.0	388 388 358 431 363	5 5 0 5	9334 9304 9100 10574 9003	417 445 416 467 435	5 6 8 3	2934 261: 9138 10944 9963	407 451 407 466 456
38 858	5 6	18	10026	5.1	o 17	1950 1951 1952 1953 1954 1955	2 7 2 1	11285 8998 10766 5795 8408 9150	4.9 4.5 4.5	627 441 546 200 399 403	1 1 1	5220 6630 5960 5630	360 305 267 309	!	5932 5767 6791	447 318 323
±6 7 06	в 2b	65	6043	4.9	330	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	// / / / / / / / / / / / / / / / / / /	7450 6647 7659 6973 7761 7420 8046 8840 9040	5.0 4.6 4.7 4.5 4.7 4.6 5.1 5.0 4.6	270 326 367 341 372 360 364 44. 448 412 437	1 3 5 13 6 3 1 1 2	3610 7503 6756 7978 3270 9310 6770 6770 8520 7750	38, 40 = 37 ; 37 ; 42 6 44 4 9 43 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	12 6 5 3 1 1 2	9025	412 4+5 45 1
906pr	ż 37	43	8021	4.6	372	1959 1959 1954	7 12 21	8308	4.0	328 392 386 349	ь 12 21 э	31.3 75.9 7579 77.3	413	5 11 18	6647 9585 1021	4. 3
59147		1	7900		310	1956	ı	7900		510	1	so 1 0	414			
39704		1	13170	5.4	704	1957	1	13198		709						
4012a	7 ćó 7	103	80≯1	4.6	364	1954 1955	0 24	847/ 7741	4.4	3/4 344	>14	9237 7237		6 23	8190 8490	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING URGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVENAUL	01 311			,	COUNT ATT	LINE C			, KESIKEITE II					
SIRL NO.	DAUGHTERS NU.	KLCORDS NO.		TLST PCT.		FRESH YEAK	REÇORUS NO.		TEST PCT.		305-OAY C RECOROS			YLARLY HE RECOROS NO.		
						1956 1957 1958 1959 1960	.∋UER1 18 18 15 19 3	7932 8071 8389 8507 8187	4.5 4.5 4.8 4.6 4.9	350 359 398 385 402	18 17 11 19 2	8988 9964 9133 8749 8130	404 438 428 412 379	18 16 11 18	8990 9644 8644 9177 8666	406 422 403 437 401
409032	2 1	2	9890	4.4	435	1956 1957	1	8920 10860	4.6	413 452	1	9360 11200	408 546	1	8415	400
41176	7 1	1	9290	4.5	421	1955	i	9290	4.5	421	1	9340	480	1	9548	470
426020) I	l.	4110	4.6	195	1959	1	4180	4.0	193	1	7970	327	1	7161	310
42815	5 109	213	7386	5.1	375	1951 1952 1953 1954 1955 1956 1957 1958 1959	4 24 25 44 35 27 24 14 14	7018 7913 7158 7455 7708 8190 7760 8121 8227 10805	5.1 5.0 5.0 5.1 5.1 5.1 5.1 5.2 5.1	355 396 359 373 385 417 398 423 423 528	2 12 21 43 35 25 21 13 14 2	9400 8339 8422 8114 8311 8023 9210 9393 9312 11170	432 393 388 393 403 415 431 436 442 547	18 42 33 24 21 13	8417 8234 8719 8567 8774 8986 9667	3/7 401 418 410 420 426 458
433723	3 ì	4	5980	4.6	2/7	1955 1956 1957 1958	1	5760 5520 6180 6460	5.0 4.6 4.5 4.4	286 256 279 285						
43760	1 49	99	1800	4.6	363	1953 1954 1955 1956 1957 1958 1959 1960	9 19 22 16 11 8 12	7848 7157 8454 7556 7237 8756 10939 6425	4.8 4.7 4.0 4.7 4.9 4.8 4.8	376 339 392 356 360 419 529 382	8 15 22 15 11 7 8 2	7864 7863 8910 9027 8899 8750 9376 8295	389 369 414 430 421 416 449 417	6 13 21 15 10 6 8 2	7663 8040 8668 8716 9173 9281 9979 8589	373 377 416 414 430 440 471 433
439591	1 11	د ا	6808	4.9	333	1952 1953 1954 1955 1956 1958	2 4 8 5 1 1	5995 7700 6423 6988 8840 8620	4.7 5.0 5.0 4.8 4.2 5.2	276 382 321 344 374 452	1 4 8 5 1	4260 8718 8133 8950 8060 10140	225 398 370 391 383 504	4 7 5 1	8673 7932 8376 7456 10486	407 368 374 357 519
44441	7 1	1	7410	5.6	412	1958	1	7410	5.0	412	1	12970	472	1	10397	348
4530 15	5 8	14	6860	5.2	358	1953 1954 1955 1957 1958 1959	1 7 2 1 1 1	8110 6827 7960 10340 11140 9240 5110	4.7 5.2 5.4 5.5 5.6 5.1	379 354 445 556 612 519 263	1 7 2 1 1	8140 8946 8145 9620 9930 9630 8710	388 426 408 484 512 471 438	1 5 2 1 1	8796 7820 8143 9429 10181 9679 9363	440 360 403 403 522 496 476
457469	? I	1	7700	4.7	361	1960	1	7700	4.7	36 I	1	10780	393			
466767	7 11	16	81n4	4.5	307	1956 1957 1958 1959 1960	3 4 3 1	8943 8076 6968 9693 10810	4.4 4.7 4.7 4.7 4.5	395 369 330 454 490	2 4 4 3 1	9360 9913 8893 8687 10350	474 467 395 396 461	2 4 4 3 1	9271 8322 8677 9835 11009	465 399 468 444 465
472365	5 9	17	8393	5.2	436	1956 1957 1958 1959 1960	2 5 4 1	9210 8112 7874 8685 8060	5.4 5.6 4.9 5.0	525 442 443 424 404	2 5 4 1	10845 11542 9608 10020 8880	529 538 453 417 394	2 4 4	10366 9549 9532 11164	529 478 439 472
474%39	43	51	7639	4.9	370	1955 1956 1957 1958 1959 1960	12 7 8 17 3	6948 7636 7536 8430 7519 11317	4.7 5.1 4.9 5.1 4.8 4.7	329 365 373 424 362 532	12 / / 7 15 3	8460 9314 11203 9313 9757 9923	405 418 496 481 435 489	3 10 7 7 16	9459 9420 9303 9653 9951	434 436 472
475418	В 17	19	/542	4.6	351	1957 1958 1959	2 4 13	6625 8278 7529	5.0 4.9 4.6	331 404 345	14 13	13175 9558	440 403	ц 11	₹363 954 I	408 378
478125	52	71	8321	4.9	408	1955 1956 1957 1958 1959 1960	5 13 12 13 26 8	9724 7282 8211 7902 8495 9253	4.8 4.9 5.∠ 5.1 4.8 4.8	471 359 425 379 410 442	13 11 11 25	13184 10536 10597 9042 9169 9934	590 478 477 413 424 467	5 10 10 11 24	10497 9682 9896 9292 9577 9701	468 446 4+5 427 445 450
486.33	S 4	6	7479	4.7	344	1954 1955 1956 1959	1 2 1	6840 6630 7980 7900	4.9 4.8 4.5 4.6	335 308 353 307	1 2 2 1	6010 6470 7540 7980	328 313 413 385	1 2 2 1	7390 7604 7804 8694	303 371 371 408

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

7495 4.3 325

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. L8. L8. NO. L8. L7. SIRL DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. FRESH RECORDS MILK TEST FAT NO. LB. PCT. LB. YEAR JULBINSEY 7060 6.5 7590 4.8 8270 377 8382 - 1 7325 5.6 403 1217 4.9 352 4.8 4.7 5.0 4.8 7219 8514 J54 504/02 9068 4.9 445 5.1 4.9 5.0 9d 10 7840 9220 10376 479 9314 10197 1958 7930 4.6 7835 5.3 500/33 3.1 8214 5.1 411 7772 3ad 10176 4=6 5.0 5.1 ∍213**6**3 6285 4.6 300 5.5 4.5 209 9100 446 9826 447 6/63 1670 4.8 1670 4.8 0.6 10955 456 lı. 9855 4.7 453 9855 4.7 453 4 10283 460 10513 479

7495 4.3 325

9685 470

9816 462

TABLE 15.--DAUGHTUR-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING GROANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRE HENING--RECORDS FRO THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE D.	AUGHTERS NU.	RELORUS VO.	MILK LB.	TLST PCT.	FAT LB.		RECORDS	LB.			SOUNDAY O RECORDS NO.	MILK	FAI LB.	YEARLY HI RECORDS NO.	ERU AVI MILK LB.	FAI
598346	12	10	12464	5.8	46 (1947 1948 1949 1950 1951 1952 1953 1954 1955	41 4 3 3 4	12385 13970 12583 13430 15155 14305 12402 16637 15110 18920	3.5 3.7 3.7 3.8 3.5 3.5 3.5	459 484 476 502 559 551 435 623 551 690	1 1 2 1 1 2 2	11702 12950 10170 11650 11550 10440 11170 11410 12310	431 485 375 416 456 419 442 444 471		8851 11047 11723	
645901	5	20	12230	3.5	429	1947 1948 1949 1950 1951	11 3 2 2 2	1350 12670 14945 11950 14370	3.2 3.3	458 454 479 395 450						
653403	69	131	11203	3.5	386	1947 1948 1949 1950 1951 1952 1953 1954 1955	92 26 20 11 11 7 6 5	10930 12530 12186 12751 12621 13356 11583 12216 12615 16300	3.4 3.5 3.5 3.5 3.4 3.7	3/4 435 417 436 435 407 407 413 461 597	3 3 2 3 3	11940 12343 12200 12480 11507 10970 10702 10673 13715 13310	403 457 441 410 416 436 553	5 4 2 1	10005 10453 11821 12840	
672561	6	22	13132	3.6	470	1947 1948 1949 1950 1951	11 3 4 2 2	12157 12033 12968 14375 13855	3.6 3.6 3.8	460 428 454 536 514						
073525	2	17	16160	3.5	563	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	1 1 1 2 2 2 2 2 1 1	10210 15800 12360 16010 15045 21015 14145 15715 19180 18720 17595	3.8 3.5 3.5 3.1 3.5 3.6 3.1 3.5	429 542 468 558 514 650 493 564 567 659 665	1 1 2 2 2	15100 13640 13200 15015 15735 16380 15855 14705 16310 16500 15215	521 599 579 568	2 2 1 1 2	16154 14475 15146 1504 14595	62 / 384 390 60) 58 î
/0 ad 43	9	26	10629	3.7	395	1947 1948 1949 1950 1951 1952 1953 1956	13 4 2 1 2 2 1 1	10701 11175 9995 11170 10075 12425 15020 19770	3.7 3.8 2.5 3.7 3.7 3.0	405 417 377 279 376 455 573 784	1 1 1 1 1	11900 12770 14370 13370 14150 13510 14660	526 536 544		13843 15293	
704963	11	28	9548	5.6	341	1947 1948 1949 1951 1952	14 6 5 2	10074 9807 10002 12185 14500		357 319 576 384 452						
(11/185	1	1	16250	3.5	568	1949	1	16250	3.5	368						
734956	6	22	11324	3.7	415	1947 1948 1949 1950 1951	14 3 3 1	11969 11913 9470 9110 11220	3.0 3.0 3.9	479 456 346 354 453						
743,03	254		10572		392	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	31 55 83 107 110 63 76 54 21 9	10020 10226 10787 10997 10355 10890 11385 11540 12589 13161 12037 13378 10440	3.7 3.0 3.7 3.7 3.7 3.7 3.7 3.6 4.0 3.9 4.1	362 364 378 413 362 403 423 432 472 561 477 522 424 450	1 / 4 / 5 / 5 / 6 / 6 / 6 / 6 / 6 / 6 / 6 / 6	8700 11569 12796 12705 11467 10c/d2 10c/d6 10c/d7 115-14 11947 11775 12973 11605		44 41 50 10 0	10154 10463 11694 11594 11707 12606 13637	571 407 450 486 461 455 510
141242	1	- 1	13470	3.5	469	1953	1	13490	5.5	469						
/ 43046	110	348	11046	5.7	41J	1947 1948 1949 1951	54 55 40 42 37	10178 11343 11340 12549 11406	5.1 5.7	376 417 419 462 434	2 6 6 11 12	11970 14207 11772 11379 11908	487 437 433			

15

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN AR!IFICIAL BRELDING ORGANIZATIONS--GROUPLO BY BRELD,
BY YEAR OF ERENTMING--RECORDS FROM THIS STATE ONLY

	UAUGHTER	AVERAGE	BY SIF	RE		R	ECORD AVE	RAGE [SY SIR	EBY	FRESHENING	YEAK				
SIRE NO.	DAUGHTERS NO.	RECORDS		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.		305-UAY (RECURDS NO.	ONTEMP MILK Lb.	AV. FAT LB.	YLARLY H. RECORDS NO.	MILK BLU LU-	RASE FAE Lb.
						1952 1953 1954 1955 1956 1957 1958 1959		11737 12573 12748 13977 12934 12812 13390 16350	3.7 3.8 3.9 3.6 3.6 3.6 3.6	439 477 492 516 492 460 472 566	10 17 16 8 6 4	11435 10650 11264 11751 11797 11245 12630 16990	432 404 437 450 470 441 493 647	11 16 8 0 4	10549 10992 11441 11567 11633 12317 16732	407 423 429 441 462 471 639
748047	35	109	11065	3.6	393	1947 1948	60 15	11238 12538	3.6	404 428	10 2	12707 12265	45 F 50 T			
						1949 1950 1951 1952 1953 1954 1955 1956	ช่ 9 4 4 1 1	11970 12468 12180 10663 12008 13330 10200 11480 8910	3.5 3.6 3.6 3.5 3.5 3.5 3.5 3.3	418 447 435 348 421 462 335 370 291	4 5 3 4 1 1	13073 10853 10903 10893 10850 7660 9500 8d00	462 421 399 420 449 283 367 316	4 1 1 1	10004 9712 8186 10006 9254	384 4/3 293 367 347
748441	l	10	15101	5.6	534	1947 1948 1950 1951 1952 1953 1955 1956 1957 1959	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12440 12320 18350 13800 18200 15640 19080 13790 14180 13210	3.7 3.4 3.4 4.0 3.1 3.5 3.4 3.8 3.7 3.6	465 417 616 552 572 549 656 522 519 475	1 1 1 1 1 1 1 1	13350 14220 14800 15450 15280 15580 16240 16690 14530 14050	483 522 579 565 559 564 583 658 577 542	1 1 1 1 1	16154 15140 15042 14595 14998	627 570 600 585 608
749201	1	3	11947	4.0	479	1948 1949 1950	1 1 1	10640 12640 12360	3.8 4.0 4.2	407 512 519						
755100	6	25	10930	3.5	392	1947 1948 1949 1950 1951 1952 1953 1954	11 3 2 2 2 2 2 1	11163 12623 13345 13635 13850 12430 13480 12480 13080	3.6 3.6 3.6 3.6 3.7 3.9 3.8 4.2 3.6	401 452 488 494 516 484 509 524 471	1 1 1 1 1 1 1	11140 13120 12610 11020 12230 13040 10320 10230 11040	344 460 446 409 479 505 384 394 428	1 1	12481 11260 11827	
157590		1	18840	3.3	625	1958	1	18840	3.3	025						
758123	16	40	10688	3.6	385	1947 1948 1949 1950 1951 1953 1954	25 7 2 2 1 1	11104 9430 9385 11725 11400 18960 11710 11610	3.5 3.6 4.0 3.3 3.3	389 347 336 419 450 629 390 417	}	10990 9310	380 347	1	975 6	348
758846	5	21	13605	3.9	537	1950 1952 1953 1954 1955 1956 1957 1958 1959	2 2 1 2 2 2 2 3 5	11230 12020 17930 16020 12555 16030 15490 14102 12990	4.1 4.2 4.0 4.1 4.0 4.0	457 487 756 631 510 631 622 536 474	1 2 1 2 2 2 3 4 2	10560 12460 14680 11760 10130 13135 13603 14023 11750	420 482 572 462 409 530 550 541 440		13843 12797 9766 13140 12517 12960 12743	502 395 527 523 512
760153	5	20	8278	3.8	321	1947 1948 1949 1950 1951 1952 1953	11 2 2 1 1 1	9025 10935 10640 12540 15490 11620 13980 14410	4.2 4.6 3.8 3.7	355 440 479 480 578 498 511 593	 	10030 11310 12160 12500 13910	409 453 463 471 551		12241 14007	
760621	∠8	67	9888	3.6	355	1947 1948	12 11	8952 10366	3.7	330 365	1	5500 9600	286 366			
						1949 1950 1951 1952 1953 1954 1955 1956 1957	8 7 8 4 7 5 2 1	9985 10437 10135 12050 11153 10058 12655 8840 14260 14830	3.5	352 332 346 435 404 333 369 323 445 554	2 3 3 6 5 2	10720 9763 9213 9797 9674 16230 4950 12560	404 412 416 393 398 382 386 492	6 5 2 1 1	10161 9882 10192 10377 8655 13799	359 306 415
760079	74	197	11201	3.0	405	1947 1946 1949 1950 1951 1952	60 22 19 17 15	11264 11517 12032 11675 12450 10736	3.6 3.6 3.1 3.5	398 407 429 429 433 392	1 1 3 4 3	17000 12923 13220 12283 13218 11080	627 470 503 475 493 425			

DAUGHTER AVERAGE BY SIRE

SIKE No.	DAUGHTERS			TEST PCT.		FRESH YEAR	RECURDS NO.		TEST PCT.		SOS-DAY (RECORDS			YEARLY HE RECURDS NO.		FAT
						1953 1954 1955 1956 1957 1958 1959	22 5	TLIN 11084 10837 10354 12096 13547 10460 13285		423 413 360 433 503 434 336	22 5 8 5	10331 10505 10664 11513 12754 12280 12465	387 399 410 453 496 475 491	19 4 5 5	11268 10441 10372 9699 12283 12688 12786	392 400 382 475
76076	9 1	1	12280	5.6	447	1953	1	12280	3.0	441	1	10660	402	1	10704	317
76040	8 13	43	11982	3.0	450	1947 1948 1949 1950 1751 1952 1953 1954 1756	5 6 3 3	11744 12234 13390 12218 11683 11367 12570 9236 10050 7460	5.1 4.1 3.9 5.9 3.9 4.1 4.0 4.0 4.1	428 500 517 478 457 471 507 369 417 505	 		413 692 704 568 501 456 488 489 621	 	11827 12481 1341	438
₹6±9466	0 303	689	11031	3.8	441	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	7 22 47 74 79 86 112 105 72 40 23 12	1149 <i>1</i> 11365	3.8 3.b 3.9 3.8 3.8 3.8 3.8 3.8	467 477 470 420 440 438 431 471 449 486 405 445	4 10 25 55 65 103 100 67 39 19	13738 12845 11742 11697 11011 11127 12640 11574 12122 12349 11206 11575	526 491 439 437 427 430 467 445 464 464 429 459		10623 10542 11175 11540 11867 12075 10720 12666	411 434 444 458 460 422
1 6836	6 11	32	13080	4.0	511	1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	4 6 4 4 2 3 2 1	11510 12684 13345 10725 14420 17780 12187 14900 14960 12500	3.9 3.9 4.6	509 497 520 421 521 625 460 515 684 473	3 3 3 2 3	11705 14935 14343 11533 12037 14775 13493 14035 16410 15280	393 545 532 443 469 534 532 579 617 563	3 4 2 3 2 1	10322 9677 12453 13091 14590 16317 16841	312
77586	9 1	4	10153	3.6	308	1952 1953 1955 1956	1 1 1	13630 10440 7990 8550		494 400 270 300	 	12450 11130 11500 12880	404 404 445	1 1 1	10933 10682 12121	391 385 458
77763	7 10	36	11589	5.7	451	1947 1948 1949 1950 1951 1952 1953 1954	15 5 4 3 4 3 1	12175 12218 12945 12437 11898 9603 12120 13390	3.8 3.7 3.1 3.7 3.6 4.2	453 453 480 468 441 301 507 445	3 1 2 2 2 2 1	14507 13600 9875 11465 15525 15310 10370	526 440 502 594 566 407	ı	14105	555
78106	2 15	49	10307	3.5	360	1947 1948 1949 1950 1951 1952 1953	24 8 5 4 2 1	9988 10475 12910 12250 12495 12405 12430	3.0 3.4 3.5 3.4 3.5	350 373 443 429 426 429 426	 	8290 11430 11650 9000 10760 12070 12340	278 425 433 382 372 436 454	1	12699	422
18298	9 10	41	10452	3.7	390	1947 1948 1949 1950 1951 1952 1953	2 2 4 2	10769 12460 13780 9810 13558 13045 18030	3.9 3.8 3.7 3.6	367 304 465	1 1 h	11550 12690 13750	483 498 543 524	ı	12664	5uo
78395	0 35	88	11039	3.9	425	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	16 11 8 9 6 9 6 4 2	11323 11798 11956 10978 12784 11887	4.0 3.9 3.9 3.9 4.0 3.7 3.8 5.9 4.0	449 454 461 431 514 449 353 412 467 551 551 538	2 1 4 5 6 3 2	10710	493 544 460 369 404 429 420	6 2 1	9796 10530 11129 10993 9211	412 417
78.35°	9 ၁୪	151	10428	3.0	377	1947 1948 1949 1950 1951	1 13 29 34 27	7450 10827 10429 10491 10956	3.6	304] 5 4	64.50 9470 8610				

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.		KECUROS NO.				FRESH YEAR	RECORDS		TEST PCT.	FAT L8.	305-DAY RECORDS NO.		FAT	YEARLY HE KECOROS NO.		FAT
						1952 1953 1954 1955 1956 1957	HOLS 17 15 8 3 2 1	TEIN 10263 10875 9931 11017 11525 13880 13420	3.6 3.5 3.5 3.8 3.9	379 398 345 383 436 543	8 5	10233 9188 9898 11607 11860 14390 12900	372 361 375 425 455 544 507	8 5 3 2 1	9269 9856 9694 11009 14094 13941	352 381 376 410 549 542
792318	3 1	ł	11575	3.5	399	1951 1952 1953 1954	1 1 1 1	11760 9470 11070 14000	3.4 3.5	383 325 386 501	i 1 1	12010 13540 14370 15630	433 504 518 612	1	14268	549
798451	1	5	13472	4.3	570	1949 1950 1951 1952 1954	1 1 1 1	13810 14070 16670 14460 8350	3.9 4.2 4.6	529 554 695 670 404	1 1 1	14690 14640 13000	793 564 486	1	12382	469
799061	53	147	10388	3.8	391	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 21 19 21 21 23 12 7	9732 10447 10233 10008 10429 11575 12176 12321 12114 11441	3.8 3.9 3.8 3.8 3.8 4.0	377 396 388 390 401 448 473 488 454	4 11 14 20 21 23 11 7 5	11553 11046 10761 10526 10777 11862 12233 12231 12760 11070	469 419 409 411 422 459 462 460 465 411	14 20 22 10 7 5 6	10409 10307 10862 11977 12032 11693 9580	399 400 420 465 468 439 381
799875	5 5	6	10798	3.6	384	1955 1956 1957 1958	1 1 1 3	8680 11040 14440 10857	3.2 3.3 3.1 3.8	271 359 453 413	i 1 1 3	12090 11590 14760 12233	453 424 521 460	1 1 2	1267 <i>1</i> 12862 13707	46∠ 453 534
806222	2 1	2	13430	3.5	475	1947 1948	1	13320 13540	3.5 3.5	4/1 478						
81514	3 4	7	llt∠o	3.8	438	1956 1957 1958	3 3 1	11850 11387 13600	3.8 3.7 3.6	445 417 484		12063 13993 11090			12612 11648	
81704	i 1	ı	14660	3.8	563	1947	1	14660	3.8	563						
817970) 31	78	10354	5.7	379	1947 1948 1949 1950 1951 1952 1953 1954 1955	11 17 10 12 7 8 5 5 2	9612 9221 11862 12583 12373 11193 10336 12934 13765 15940	3.8 3.6 3.6 3.6 3.6 3.6 4.0	359 347 430 447 440 405 367 502 541 635	1 3		386 436	5 5 1 1	10577 10541 11946 12960	745 409 409
821509	5 115	250	12143	3.7	450	1954 1955 1956 1957 1958 1959 1960	35 55 55 45 32 21 7	11082 11503 11714 12028 13808 13988 13373	3.7 3.7 3.7 3.1	412 422 434 439 516 515 511	32 52 49 39 24 20 6	11182 10980 11643 11892 12891 12605 11093	434 426 457 452 491 490 448	30 47 47 38 24 18 5	10701 10631 11350 11287 12218 12981 11741	409 412 443 436 470 504 473
62852	2 2	14	12685	3.5	435	1952 1953 1954	2 1 1	12605 13020 12510	3.0	419 408 434	1	13290 11870	467 435	1	11096	397
₺303 29	o 61	170	10139	3. 6	35∀	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	14 17 24 30 19 25 13 13 7 7	11075 10772 10378 10429 10348 10524 10240 11105 12753 10986	3.5 3.6 3.6 3.6 3.6 3.5 3.4 3.4	364	1 3 6 6 8 0 11	10985 9550 10857 10505 11395 10165 11544 11082 11442 11268 12680	403 421 388 433 428 435 430	5 11 6 5 2	9919 10727 11503 11979 11391	410 431 454
83059.		1		3.1		1952	1	6560		206						
83137) I	2	13395	4.2	562	1958 1959	1	13550 13240		583 540	1	16540	609			
83273	5 I	2	16670	3.3	555	1958 1959	1	20310 13030		703 406	1	13540 9440	505 337	1	9047	323
8370∠			11130		508	1954	1	11130		508	I	12310	428			
84427	5 6	11	11441	3.7	422,	1954 1956	1	10470 11100			1	9900	3/3	1	10410	396

TABLE 15.--CAUGHTUR-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING-RECORDS FROM THIS STATE ONLY

DAOGHTÉR AVERAGE BY SIRE

SIRC NO.	DAUGHTERS NO.	RELUROS NO.		TEST PCT.		FRESH YEAK	KLCUKUS NO.		IEST PCT.		305-DAY RECORDS 40.			AFTWEA H		
						1958 1959 1960	HOLS 2 4 3	15490 12085 10110	3.5 4.0 3.5	329 483 354	2 4 3	13120 14510 11703	501 577 425	1 5 2	10344 13364 12007	585 504 436
64005	6 529	1058	11930	3.8	450	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 36 81 114 150 160 152 161 163 37	9425 10992 11252 11551 11985 12044 12516 12763 12630 11769	4.7 3.6 3.6 3.6 3.6 3.6 3.6 3.8 3.8	395 417 422 435 455 456 470 486 475 440	1 20 70 107 140 151 136 130 158 33	10400 11164 10099 10992 11635 11794 12190 12544 12018 11787	409 427 414 419 450 458 468 460 460	53 96 127 136 125 125 139 21	10663 10752 11030 11325 11523 12052 12453 12275	405 415 427 445 448 461 476 465
85488	У 33	81	9270	3.7	343	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	9 13 20 14 9 4 2 4 2 2	8663 9110 9801 9546 10334 12513 11710 11625 9765 14010 14175	3.7 3.6 3.7 3.6 3.7 3.8 3.8 3.8 3.8 3.0 4.1 3.3	315 337 362 348 377 473 444 422 398 458 498	1 2 3 4 4 2 4 2 2 2 2 2 2	12040 14695 11800 11360 10745 10650 10255 7658 10755 10455 14070	426 509 429 424 595 405 398 372 440 394	2 4 2 2 2 2	9903 9780 9807 9947 13789	357 379 362 39 1 5. 3
85859	1 1	2	13455	5.6	473	1953 1954	1	12620 14290	3.6 3.5	452 494						
80551	3 1	2	12105	3.6	421	1957 1958	1	12570 11640	3.0 3.5	448 406	1	11870	484	1	982 I	30 -
86591	2 375	837	10985	5.8	418	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	25 15 25 100 171 176 145 97 51 43	12115 12312 8876 10228 10298 10671 11196 11281 11916 12268 12873 12350	3.5 3.9 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.7 4.1	393 483 339 405 589 407 429 434 449 469 483 501	4 9 80 156 151 77 40 50	10768 10744 10649 11104 11668 11309 12352 12596 12057 10917	393 410 400 425 449 453 469 486 470 415	01 150 154 130 76 46 37	1009 I 10372 1105 p 110634 12322 12345 13347	305 349 424 451 44+ 474 476 520
86003	5 1	2	12045	3.8	45b	1954 1955	1	9910 14180	3.8 3.8	378 538	1	10770 11750	387 449	1	10573 10682	3-7 3-5
86 / 4 I	2 5	8	12110	4.0	4 7 8	1955 1956 1957 1958 1959 1960	1 1 2 2 1	8400 12510 16510 13455 13355 11280	4.7 3.5 5.6 4.5 5.0 5.2	394 416 593 572 495 359	1 1 2 2 1	11190 10120 12240 14125 12910 11580	441 384 446 544 4 7 9 420	1 1 2 2 1	9766 10464 12726 13467 12415	395 335 434 509 446
88018	8 2	ý	13390	3.6	476	1953 1954 1955 1956 1957 1958 1960	1 2 2 1 1 1	13960 13910 12220 13600 14760 14460 12570	3.6 3.7 3.0 3.5 3.5 3.4 3.4	501 515 431 476 520 496 433	1 2 2 1 1 1	11170 10450 12580 10560 13070 12900	431 411 495 419 501 502	1 2 2 1 1	11794 11544 10993 11314 11881 10922	450 442 429 448 458 458
88056	6 11	57	11869	3.6	423	1947 1946 1949 1950 1951 1952 1953		14670 11178 12159 13617 12486 12735 12280 12928	3.5 3.6 3.8 3.4 3.0	552 593 441 506 424 450 416 437	2	13820 14715 9610 10290 10670 9733	475		10137 10246	
88317	8 2	7	9645	3.5	330	1951 1952 1953 1954 1955	1 2 1 2	9020	4.1 3.4	276 345 468 353 392	1 2 1 2	8770 9020 8990 9680 12230	282 332 364 335 497	1	11619 10213 11272	420
88433	8 2	5	13015	3.6	473	1947 1948 1949 1951 1959	1 1 1 1	10910 14390 15060 14120 12410	3.5 3.1 3.7	384 508 563 519 452	Ī	13340	632	1	1238?	4/6
88918	1 5	7	11534	3.9	451	1957 1958 1959	1 2	11280 10980 12158	4(1	44()	1 2 4	7490 11795 10873	286 469	1	7314	200
39303	8 1	2	13605	5.4	463	1949 1950	·	12400 14810	5.4		4	10075	4.37	4	11020	,
69145	2 97	301	10639	3.8	400	1947	2	9355 10261	3.4	319 395	3	11440	400			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKÉ NG.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NU.		TEST PCT.	FAT LB.	SOS-DAY (RECORDS			YEARLY HI RECORDS NO.		F4T
						1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	HOLS 17 41 44 48 36 22 19 7	TEIN 11071 10833 10153 10956 10803 11080 12161 12648 11866 14043 12933	4.0 3.8 3.7 3.8 3.8 3.8 3.8 3.8 3.8 3.8	4411 382 407 410 416 463 480 448 522 487	6 14 16 27 32 33 19 14 6	11960 11491 10477 10718 10365 10326 11251 12007 11407 12968 12353	463 450 412 415 404 411 444 481 427 505 474	25 33 17 13 6 4	10031 10323 10899 11468 11282 13045 12587	397 411 478 455 432 508 488
897933	3 16	ή Ο	10049	3.7	370	1948 1949 1950 1951 1952 1953 1954 1955 1959	1 6 12 5 5 1 2 2	11220 11332 11394 9608 9322 9136 10860 9990 7870 13490	3.3 3.6 3.7 3.6 3.7 3.7 3.7 3.6 4.0 3.5	376 410 417 344 340 340 401 360 316 475	2 1 2 2 1 2 2 1	12450 9530 10590 9030 11160 10560 10090 13930	435 307 350 313 418 391 390 507	2 1 2 2 1	9838 10268 10617 8600 13440	363 375 388 346 500
898470	0 1	3	9503	3.5	334	1949 1950 1951	1 1 1	8680 10370 9460	3.4 3.6 3.6	293 371 338						
899350	0 62	116	9860	5.6	355	1948 1949 1950 1951 1952 1953 1954 1955 1956	4 15 31 24 13 12 5 7 2	10750 9650 9866 9938 10265 11669 11694 13059 14950 13185	3.5 3.7 3.6 3.0 3.7 3.6 3.5 3.5 3.5	374 359 355 354 375 419 443 457 509	1 7 6 6 5 7 1 3	13160 11868 11931 10890 10985 10578 11366 14010 133d3	475 466 436 405 418 403 434 535 510	7 44 7 1 3	9743 9832 11032 12535 12026	387 381 475 480 472
902915	5 1	1	7660	4.0	307	1957	1	7660	4.0	307	1	13310	515	1	9621	3h2
911290	0 2	2	11515	3.8	431	1951 1953	1	11740 11290	3.9 3.6	454 408	1	13190	494	1	14361	542
913986	5 52	137	11130	3.6	400	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 17 27 34 21 17 9 8 3	17700 11574 10865 10978 11552 12431 13809 13838 15377	3.4 3.5 3.6 3.6 3.5 3.5 3.5 3.7	596 405 391 388 403 434 479 510 570	1 9 21 29 19 14 8 5	12980 10466 10711 10850 11215 11380 13065 13724 12513	524 405 413 410 430 439 511 534 475	14 28 19 14 8 5	9912 9910 10792 11022 12275 12123 13382	389 389 420 432 475 467 502
919608	3 I	1	12750	3.7	467	1959	1	12750	3.7	467						
920562	2 3	4	9115	3.7	340	1955 1959 1960	1 2 1	9050 9815 6740	4.5 3.3 3.3	467 327 224	1 2 1	11840 10600 7 700	452 385 369	1	12197 12470	458 494
92185	3 218	460	11261	4.0	44 8	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 9 10 15 19 37 95 88 80 56 42 8	1000¢ 11523 8586 9388 8782 10646 10759 11316 11292 11996 12246 11390	3.8 4.1 3.9 4.1 4.0 3.7 4.0 4.0 3.9 4.1 4.0 3.9	377 476 340 351 347 414 420 452 444 467 495	7 11 15 35 86 80 64 47 42	10337 10366 9032 9765 11038 11302 11014 12048 12093 12087 11473	415 385 383 413 441 454 461 466 463 430	15 32 67 79 58 45 36 3	10286 10471 10681 11226 11212 11962 1218F 12492	
92185	7 2	2	8980	3.9	351	1956	2	8980	3.7	351	1	67 o 0	265	1	6507	254
921658	8 211	406	10540	3.8	400	1952 1953 1954 1955 1956 1957 1956 1959 1960	17 101 99 87 76 51 32 18 3	10625 10304 10226 10706 11091 10913 12369 11423 11540	3.8 3.9 3.8 3.8 3.8 3.7	409 388 412 425 414 465 427 435	10 93 81 70 45 27 17	10:03 11110 11041 11257 11:70 12:036 12:013 11447	427 425 425 439 457 464 436 445 452	65 81 73 67 42 25 17	10736 10357 10515 11207 11325 11994 11927 12797	403
9233 T	4 В	15	11474	5.8	430	1955 1956 1957 1958 1959 1960	2 3 2 4 3 1	10115 11733 11535 11575 11290 767	3.9 3.6 3.6 3.6 3.8	394 458 433 433 427 285	2 1 1 3 3	7605 10770 9440 11703 12397 10010	330 401 365 435 469 360	2 1 1 2 3	8671 10389 8611 11380 13341	365 360 332 428 516
923318	В	1	17400	3.3	576	1960	1	17400	3.5	5/6	1	15050	56/	1	10097	607
92657	8 383	516	11643	3.8	439	1956	38	11110	3.8	423	رڏ	12306	483	31	11577	461

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING-RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	SIRL NO.	DAUGHTERS NO.	KELUKDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		SOS-DAY RECORDS			YEARLY HE RECORDS NO.		FAI
1984 11 11234 124 10 11234 11 11234 11 11234 11 11234 11 11234 11 11234 11 11234 11 11234 12 12 12 12 13 13 13 13							1958 1959	90 137 211	11403 12076 11977	3.8 3.8	455 453	120 205	12344 12023	476 465	112 195	12100 12326	466
1936 1938 1938 1938 1939	92906.	3 23	53	11795	3.8	449	1954 1955 1956 1957 1958 1959	11 11 12 9 3	11233 12088 11429 12996 14420 11800	4.0 3.8 3.0 3.9 3.8 3.6	446 456 433 503 544 442	10 9 11 9 2	11291 11387 10440 12478 12850 12240	424 431 392 491 487 457	10 10 9 9	11236 10272 10154 11423 12225	424 402 401 453 472
Part	92929	1 9	24	12587	3.5	430	1953 1954 1955 1956 1957 1958	3 6 4 3 2 2	13877 12345 13140 11030 14795 13880	3.3 3.5 3.5 3.4 3.7 3.8	458 430 451 367 534 529	3 6 4 2 1 2	12163 10970 11145 7910 15230 11550	456 419 436 371 57, 469	3 1 1 2	11583 9069 13276 11124	447 360 506 431
Post	93126	7 529	965	11851	3.8	453	1954 1955 1956 1957 1958 1959	118 175 170 173 162 130	10813 11429 11706 11886 12529 13194	3.8 3.8 3.8 3.8 3.8	408 436 449 451 477 203	110 164 158 152 130 126	11301 11566 11672 12002 12271 11965	431 450 456 460 472 459	100 149 145 144 128 121	10824 10746 11264 11268 12008 12349	419 418 440 440 461 473
Pose	94202	9 1	1	13420	3.9	519	1960	1	13420	3.9	519	1	12140	448	1	13374	510
959870	95242	1 1	ì	14800	3.5	514	1959	1	14800	3.5	>14						
Political Poli	95549.	3 2	2	15325	3.8	565			11740 18910	4.0 3.5					1	15097	588
Page	95587	0 4	1	11126	3.6	399	1952 1953 1955	1 1 1	14190 14530 14980	3.4 3.3 3.5	476 484 519	i I	97∠0 142∋0	353 52 <i>1</i>	1	11616	435
1	96 110	2 46	126	11075	3.7	404	1952 1953 1954 1955 1956 1957 1958 1959	22 23 21 17 17 6 3	11269 10037 10761 11062 11246 11990 14407 12830	3.7 3.6 3.7 3.7 3.6 3.6 3.6	419 375 401 405 432 428 544 405	13 16 20 18 16 6 2	106 /3 105 10 11063 11307 1206 / 117 /8 126 30 11 / 53	399 389 414 429 464 437 480 464	19 17 14 7 2 4	10395 10842 11511 11585 12388 12336	377 410 452 445 463 470
969669 5 6 12012 3.8 446 1959 1 1205 3.7 470 4 12205 475 489 1 14791 599 969967 5 6 12012 3.8 446 1959 4 12770 3.7 470 4 12205 475 489 1 14791 599 969932 1 1 1 14240 3.3 474 1959 1 14240 3.3 474 1 12250 451 973663 1 1 11370 5.5 400 1960 1 11370 5.5 400 1 9530 554 1 10976 401 97367 1 11110 5.6 400 1960 1 11370 5.5 400 1 9530 554 1 10976 401 97367 1 1 11110 5.6 428 1959 1 11180 5.8 428 1 8500 320 1 2273 515 97367 2 1 1 1 1110 5.6 428 1959 1 11180 5.8 428 1 8500 320 1 2273 515 97367 2 1 1 1 10056 5.7 452 1955 41 1120 5.7 412 58 12405 477 74 12201 477 1958 85 1253 5.7 412 58 12405 477 74 12201 477 1958 85 1253 5.7 450 488 11107 451 50 1286 505 973750 1 1 10056 5.7 589 1959 1 10520 5.7 509 1 12780 452 987869 2 5 13938 5.8 529 1955 1 13850 5.9 545 1 16440 602 1 13857 577 987869 1 1 12850 4.4 558 1960 1 12850 5.9 545 1 16440 602 1 13857 577 987869 1 1 12850 4.4 558 1960 1 12850 5.9 545 1 16440 602 1 13857 577 987869 1 1 12850 4.4 558 1960 1 12850 5.9 545 1 16440 602 1 13857 577 987869 1 1 12850 4.4 558 1960 1 12850 5.9 565 1 17100 677 997461 2 2 11515 5.6 400 1 12850 4.4 558 1960 1 12850 5.9 595 1 14200 525	96439	5 46	Вс	11337	3.6	40/	1956 1957 1958 1959	7 14 17 17	11204 10981 11578 11404	3.0 3.7 3.6 3.0	397 405 420 410	0 13 11 17	13268 11639 12745 11865	507 449 471 451	12 10 15	12503 10994 12580 12164	468 435 478 463
969669 5 6 12012 3.8 446 1959 4 12770 3.7 470 4 12205 475 489 1 14791 590 969932 1 1 1 14240 3.3 474 1959 1 14240 3.3 474 1 12450 451 97063 1 1 11370 5.5 400 1960 1 11370 5.5 400 1 9550 5.5 400 1 9550 354 1 10976 401 970472 1 1 11130 3.3 428 1959 1 11180 3.9 426 1 8500 320 1 6273 315 976709 338 457 12277 3.7 452 1956 41 11210 3.7 416 52 12103 465 48 11413 444 976709 1 1 1 10520 3.7 452 1956 41 11295 3.7 416 52 12103 465 48 11413 444 9770750 1 1 1 10520 3.7 389 1959 1 10520 3.7 450 46 11007 451 30 12860 503 978789 2 5 15938 3.8 529 1955 1 13850 3.7 450 46 11007 451 30 12860 504 987899 1 1 1 12830 4.4 558 1960 1 12830 4.4 558 1960 1 12830 4.4 558 1 14200 525 9879401 2 2 11515 3.6 403 1959 2 11515 3.6 405 2 11810 447 2 10764 427 9977401 2 2 11515 3.6 403 1959 2 11515 3.6 405 2 11810 447 2 10764 427	96621	8 1	3	9 167	4-6	421	1957	i	10630	4.8	213	1	10000	440	1	10126	45/
975663 1 1 11370 5.5 400 1960 1 11370 5.5 400 1 9530 354 1 10976 401 976472 1 1 11130 3.8 428 1959 1 11180 3.8 426 1 8500 320 1 c273 315 976709 338 437 12277 3.7 452 1956 41 14210 3.7 412 38 12405 473 37 11409 445 1957 60 11595 3.7 416 52 12103 465 48 11413 444 1959 1959 193 12748 3.7 473 191 12304 477 74 12231 472 1959 193 12748 3.7 450 48 11607 451 350 12868 505 976750 1 1 10520 3.7 389 1959 1 10520 3.7 450 48 11607 451 30 12868 505 987889 2 5 13938 3.8 529 1955 1 13850 3.4 544 478 178 12636 470 1960 50 12322 3.7 450 48 11607 451 30 12868 505 987899 1 1 1 12830 4.4 558 1960 1 12830 4.4 558 1960 1 12830 4.4 558 1 11400 525 9879401 2 2 11515 3.6 403 1959 2 11515 3.6 405 2 11810 447 2 10764 4c7	96966	9 5	6	12012	8.د	440				3.7							
976472	96443	2 1	1	14240	3.3	474	1959	1	14240	3.3	4/4	1	12430	451			
976709 338 437 12277 3.7 452 1956 41 11210 3.7 412 38 12405 473 37 11409 445 444 478 11413 444 478 178 12201 472 472 472 472 472 472 472 472 472 472	97,560	3 1	1	11370	3.5	400	1960	1	11370	5.5	400	1	9530	354	1	10976	401
1957 60 11395 3.7 416 52 12103 463 48 11413 444 1958 1958 85 12533 3.7 416 52 12103 463 48 11413 444 478 74 12281 472 74 12281 472 74 12281 472 74 12281 472 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 74 1268 470 470 74 1268	97647	2 1	1	11130	3.8	428	1959	1	11180	3.8	428	1	8500	320	1	ε 27 3	315
987869 2 5 13938 3.8 529 1955 1 13850 3.9 543 1 16440 602 1 13852 510 2 12540 5.2 463 2 14765 503 2 14050 524 2 14550 524 2 14550 524 2 14765 503 2 14050 524 2 14550 524 2 14765 503 2 14050 524 2 14	97670	9 338	437	12277	3.7	452	1957 1958 1959	60 85 193	11395 12533 12748	3.7 3.7	416 454 473	54 61 191	12103 12304 12344	463 477 478	48 74 178	11413 12281 12638	444 472 430
1956 7 12340 3.1 463 2 14765 503 2 14050 574	¥7675	0 1	1	10526	3.7	389	1959	ı	10520	3.7	509	1	12/80	452			
997481 2 2 11515 3.6 403 1959 2 11515 3.6 405 2 11810 447 2 10764 427 999758 4 11 9870 3.6 350 1952 2 8366 3.5 292 1 9470 599 1953 1 10110 3.9 593 1 9720 380	98786	9 2	5	13938	3.8	529	1956	1	12340	3.8	403	2	14765	503	2	14050	52.4
999758 4 11 9820 3.6 350 1952 2 8360 3.5 292 1 7470 599 1953 1 10110 3.9 593 1 9720 380	y8993	9 1	1	12830	4.4	558	1460	1	12830	4.4	556	1	14200	525			
1953 1 10110 3.9 593 1 9720 380	99740	1 2	?	11515	3.6	400	1959	2	11515	3.0	405	ć	11810	447	2	10764	427
	49417	8 4	11	9820	3.6	350	1953	1	10110	3.9	593	i	9120	360	3	10857	4/1

TABLE 15.--DAUGHTER-AVERAGE OF SINES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY STRE

	DAUGHTER	AVERAGE	BA 210	41		К	ECURD AV	ERAGE 8	SY SIK	F BY	FRESHENING	YEAR				
SIRE NO.	NO.	RECORDS		TEST PCT.	FAT L8.	FRESH YEAK	RECORUS NO.			FAT L8.	RECORDS NO.			YLARLY HI RECOROS NO.	MILK	
						1955 1957 1958	HOLS 3 1 1	7853 8880 10070	4.1	351 362 385		10103 11810 13860	420 454 537	3 1 1	9773 11881 10922	412 468 432
100 7 202	: 17	56	10857	3.7	399	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 6 11 10 8 5 5 9 4	10546 11270 10561 11498 11518 11408 13484 12348 11205	3.5 3.7 3.6 3.6 3.8 3.6 3.9	387 392 386 417 419 430 488 477 402	5 9 10	10975 12170 12101 12544 11614 12344 13010 12888 11870	411 456 457 476 430 475 500 508 453	3 10 7 5 5 4 2	9755 11029 11788 12062 12855 12941 11827	380 420 443 468 494 507 459
1008565	564	654	12049	3.7	445	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	27 29 29 27 68 107 124 119 104 20	12151 11657 11859 11123 12000 11672 12193 12444 12647 12306	3.7 3.6 3.8 3.7 3.7	440 431 431 415 443 430 447 458 472 442	14 16 22 24 68 102 111 99 102	12171 11676 11838 10744 11343 11744 12006 12242 12114 11751	458 449 452 412 445 461 458 469 465 438	20 25 61 94 102 101 97 12	10937 10334 10615 11006 11339 12047 12344 11537	
1011980	3	3	12337	4.1	511	1958 1959 1960	1 1 1	10700 14800 11510	3.8	444 569 521	1 1 1	11470 13460 13560	450 674 541	1	9254 12295	372 474
1013415	1	1	15360	4.0	613	1959	1	15360	4.0	013	1	14440	573	1	14595	5 7 2
1019347	189	430	10091	3.8	382	1951 1952 1953 1954 1955 1956 1957 1958 1959	15 73 90 94 68 40 25 17	10415 9486 9698 10373 10768 11580 10613 11860 14573	3.9 3.8 3.8 3.8 3.7 3.8	403 369 368 391 408 429 400 425 544	6 37 66 80 65 37 23 14 8	11210 10907 10357 10635 10924 11302 11467 11931 12986	426 405 394 406 423 433 437 445 489	49 83 62 36 22 14 8	10135 10037 10331 10902 10817 11131 13204	307
1025792	· i	2	11585	4 - 1	472	1957 1958	b 1	11640 11530	3.9 4.2	458 485	1 1	14720 14580	551 593	1	13647 14388	531 557
1026115	2	2	17465	3.4	590	1959	2	17465	3.4	596	2	12420	452	2	12404	408
1026170	8	9	12510	3.8	471	1957 1958 1959 1960	2 2 4 1	9885 11935 12680 17720	3.8 3.8	383 447 462 623	2 2 4 1	12605 12830 12758 13580	499 489 486 512	2 2 4 1	10955 11031 12369 12720	468 425 474 492
1032311	343	624	11193	5.9	440	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 24 51 68 87 78 75 92 107 39	9767 9884 10356 10251 10792 11288 11144 12112 11591 12663	3.9 3.9 4.0 4.0 4.0	398 383 402 404 430 444 437 474 455	13 39 59 60 73 69 77 101	10156 10744 10174 11224 11590 11572 12199 11963 12663	403 412 405 436 447 445 474 461 481	31 60 73 66 64 72 97		303
1034+72	2 1	1	11960	3.8	456	1959	1	11960	3.8	456	1	13140	517	1	13320	5.5
1036278	3 30	56	11581	3.9	452	1953 1954 1955 1956 1957 1958 1959	10	12040 10478 9858 10319 11714 14124 13238 14338	4.2 4.1 3.9 3.9 3.9	547	7 10 11	9820 11815 13638 13953 13389 13691 12589 13470	539 490	8 10	9349 11412 11396 11564 12675 13250 13854	422 446 495 530
1030118	2	2	14205	4.3	601	1959	2	14205	4.3	601	2	13240	563	2	13963	577
1038591	6	13	12257	3.6	449	1954 1955 1956 1957 1958 1959	2 1 5		3.8 3.7 3.7 3.7	329 467 617	1 2 1 2	10230 10830 12035 13690 13005 12160	436 490 551 536	1	9047 10726	416 496 546
104 15 59	226	296	11990	3.9	460	1956 1957 1958 1959 1960	35 103	12960 11815 12176 12231 11861	3.9 3.9 3.8	453 468 469	33 91	12980 12017 12069 11711 11238	458 466	3 28 89 113 15	126 15 11358 11878 11965 12344	440 459 464
1044218	3 97	224	10873	3.9	417	1952 1953 1954 1955 1956 1957	31 15	9902	3.9 3.8 3.9 3.9	387 407 400 430 428	37 41 46 29 13	10622 10256 10627 10866 11056 10969 11373	411 417 426 430 431	29	9533 9671 10334 10253 10657 11247	300 405 404 420

TABLE 15.--DAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIO.S--GROUPED BY GREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIKE BY FRESHENING YEAR

	DAOSITIER	HILKHOL	01 311				LOUNG AT		,, ,,,,							
SINE NU.	UAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS				RECORUS 10.		FAI	MO. K-COKP?	MILK	
						1959 1960	110 L S 10 3	TE1N 13470 11697	3.0 3.6	490 4 1 6	o 3	12573 12687	479 482	8 1	12742 8437	494 302
1046678	3 2	2	12710	3.9	487	1959 1960	1	14560 10860	3.6 4.1	528 445	1	9640	432	1	10856 12273	480 491
1054406	5	4	1407/	3.6	500	1958 1959	ا د	15440 12447	3.1 3.8	485 474	3	10747	410	3	9954	380
1055463	3 1	1	9140	3.8	348	1958	1	9140	3.3	348						
1056882	2 1	1	13150	3.1	486	1959	1	13150	3.1	466	1	10220	373	1	11440	446
1063237	7 15	50	13032	3.8	490	1952 1953 1954 1955 1956 1957 1958 1959	5 0 8 10 5 6 7 2	15354 12168 12739 1308, 12490 13620 14501 15250 11150	5.6 5.7 5.7 5.9 4.0 3.7	551 449 467 306 468 310 555 614 417	5 6 10 5 6	12574 11463 11659 12422 12724 1278 13343 14925	464 445 455 481 512 479 520 570	3 8 10 5 6	11907 11434 11774 12010 12310 13051 15947	471 461 471 433 430 513 635
1076177	/ <u>3</u> 4	78	12011	3.6	435	1954 1955 1756 1757 1958 1959 1960	9 23 19 9 10 7	12222 11676 12212 12083 13286 13130 15800	3.5 3.7 3.8 3.7 3.4 3.8	423 446 452 466 466 444 575	9 23 18 8 7	11223 12173 12648 12700 11731 12107 12170	424 478 485 493 461 465 466	9 22 19 8 5 7	11237 11386 11716 12493 12901 11986	430 437 454 460 499 448
1081270) [1	8920	3.3	292	1960	l l	8920	3.5	292	i	7340	256			
1085462	2 1	1	13640	3.6	491	1959	1	13640	3.0	491	1	11260	483	1	1095)	40)
1087974	1	3	12933	3.5	458	1958 1959	2	12 7 20 13360	3.5 3.5	452 470	1	11060 105₹0	406 416	1	10529 13004	363 458
10902 38	3 1	1	8460	3.5	291	1960	1	8460	3.5	291						
1093670	46	98	12408	3.7	453	1953 1954 1955 1956 1957 1958 1959 1960	1 23 20 16 7 11 10	7830 11389 11828 12379 13036 13183 14810 13890	3.8 3.6 3.7 3.6 3.6 3.6 3.8 3.7	301 408 429 442 466 461 555 518	1 23 20 16 7 9	11420 10906 11534 11600 12117 13726 13507	457 422 447 446 469 518 520 524	1 21 18 14 6 9	11489 10191 10840 11395 11725 13617 13969	434 375 413 427 471 527 534
1094305	5	5	13262	3.8	504	1959 1960	3 2	13110 13490	3.7 4.0	485 533	3 2	14220 15940	531 589	3 2	14130 16541	550 640
1094921	2	3	1910	4.0	395	1959	3	10250	4.0	414	5	11173	404	3	11503	417
1106775	1	1	10310	3.7	378	1959	1	10310	3.1	318	1	955C	372	1	0000	3,2
1110011	202	2/1	11566	<i>3</i> ∘8	441	1956 1957 1958 1959 1960	6 27 86 116 36	10535 11004 11893 11619 11826	3.8 3.8 3.8 3.8 3.7	405 419 452 445 442	5 25 76 110 35	13198 12766 12∠87 11594 12108	490 490 481 445 461	5 23 73 103 14	11595 11507 12142 12004 11763	455 454 471 463 458
1111075) I	1	13950	5.4	472	1959	1	13950	3.4	472	1	11236	413	1	11020	400
1111076	i I	2	16005	3.8	604	1958 1959	i 1	15520 16490	3.5	50/ 620	i	14740 13990	547 553	1	14083 14137	552 554
1113278	3 2	2	12940	3.7	470	1959 1960	1	10100 15786		360 579	1	10100 12260	414 512		10246 12132	
1118413	8 8 5	93	11938	3.7	نة 43	1958 1959 1960		12852 11985 1155	3.7	477 437 416	11 69 9	12520 12110 11411	489 470 434	11 66 8	12457 12573 12611	448
1119252	6	6	12338	4.0	487	1959 1960) 4	10706 13 1 58		433 514	1 24	13310 1174ដ	502 480	2	12993	50.3
1119255	20	32	10761	ن. د	406	1954 1955 1956 1957 1958 1959	2 6 10 3 6 5	12960 10870 10071 12020 1073£ 13042		401 411 361 445 413 447	2 0 10 3 6	11345 10262 9472 11393 11532 12464	415 405 358 455 446 464	1 6 10 3 6	10955 9331 10064 10557 11034 12638	417 473 417 473 408
1114210	1	l.	13620	3.6	494	1959	1	13620	3.6	494	1	14800	557	1	12066	402
1121690) 31	62	11378	4.0	452	1955 1956 1957 1958 1959 1960	13 15 15 7 8 2	11372 11743 11539 12124 10959 14365	4.0 4.0 3.7 4.1	466 467 466 449 531	11 14 12 9 1	11739 11668 11647 12073 11616 13055	458 453 452 472 453 472	9 13 11 8 8 2	11342 10931 11134 11965 12076 12333	454 477 401
1125395	3	3	11303	4.1	462	1959	2	8400	4 - 1	366	2	9775	416	2	10432	42.

23

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED, BY YEAR OF FRESHENING-RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE ND.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RLCORDS NO.		TEST PCT.	FAT L8.	305-DAY RECORDS NO.			YEARLY H RECORDS NO.	MILK	
						1960	HOLS	TEIN 16110	4.1	654	1	14780	560			
1131918	16	24	10714	3.6	384	1955 1956 1957 1958 1959	4 8 5 4 3	10288 10000 11822 12503 12157	3.6 3.7 3.4 3.9 3.3	356 371 406 477 394	4 7 5 4 3	11923 11660 11266 12643 10657	473 437 413 483 406	3 7 5 4 2	11325 10255 10833 12413 10906	451 386 406 457 414
1132993	3 1	2	13040	4.2	546	1959 1960	1	13190 12890	4.3	569 523	1	15610 16760	599 620	1	15097	588
1149584	36	49	11137	3.8	417	1955 1956 1957 1958 1959	1 16 13 11 8	10020 10415 9944 12630 11814	3.8 3.8 3.7 3.8	379 394 373 463 444	1 15 11 10 8	8700 11905 11476 12138 11854	347 450 440 460 455	1 12 10 10 6	10137 10408 10927 11763 11443	399 410 433 447 444
1153740) 5	5	10730	3.7	392	1959	Ś	10730	3.1	39/	5	12188	441	5	12666	46.5
1154817	3	7	11093	4.1	454	1956 1957 1958 1959	1 2 2 2	12100 13160 10940 9255	4.1 4.1 4.1 4.2	544 444 583	1 2 2 2	12280 9595 14665 11845	493 411 600 432	1 2 2 2	13178 10579 10715 11658	547 478 419 463
1156059	2	2	12050	3.7	450	1959	2	12050	3.7	450	2	12590	448	2	11968	444
1164018	3 1	1	8760	4.3	38 I	1958	1	8760	4.3	381	1	15930	612	1	16219	606
1170425	52	66	11694	3.8	438	1957 1958 1959 1960	0 31 24 5	12270 11487 12118 11384	3.8 3.7 3.7 3.9	467 428 452 441	6 29 24 5	13148 12474 12392 11814	522 472 466 443	5 29 24 2	12313 11933 12672 14056	504 457 461 547
1170910) [1	9050	3.5	319	1959	1	9050	3.5	319	1	11040	407	1	11990	446
1179574	1	1	9340	3.7	345	1958	1	9340	3.7	345	1	12100	436	1	10061	368
1183665	2	3	11518	3.9	445	1959 1960	2	12030 10190	4.0 3.3	471 334	2 1	1228 5 12180	500 485	2	11696	459
1184848	3 1	1	13940	3.8	533	1959	1	13940	3.0	533	1	14500	525	1	12066	467
1188418		33	12232	3.7	455	1959 1960	22 11	12198 12298	3.7 3.7	457 452	22 11	11301 11707	457 447	22 6	11813 13500	457 515
1190151	3	Ц.	11855	4.0	478	1959 1960	1 3	12930 11540	4.5 4.0	383 457	3	10120 10303	431 387	1 3	10813 10599	440 398
1206039	91	142	12199	3.8	458	1956 1957 1958 1959 1960	34 36 49 14	12851 11247 11835 12946 13149	3.5 3.8 3.8 3.8 3.8	456 426 450 488 494	9 30 20 49 14	13658 12733 12772 12553 11757	514 486 488 484 446	9 27 25 49 7	12110 11382 12705 12983 12893	41, ()
1211384	173	231	13010	3.8	488	1957 1958 1959 1960	4 100 105 22	13183 13015 13202 13874	3.7 3.8 3.0 3.7	486 490 494 510	4 88 104 20	10853 12314 11999 12245	435 480 458 474	64 85 7	11017 11912 12564 13256	443 461 435 511
1212395	5 l87	226	12420	3.7	463	1957 1958 1959 1960	1 75 115 35	11620 13026 12304 11741	3.6 3.7 3.8 3.7	419 483 464 433	1 63 113 30	14290 12395 11749 11777	501 482 457 447	1 56 108 14	12012 12176 12223 13385	
1215669	98	122	12884	3.8	484	1957 1958 1959 1960	/ 46 57 10	11779 13393 12649 13842	3.7 3.8 3.8 3.7	442 503 478 517	7 44 59 10	13554 12732 11891 12488	500 499 463 481	7 43 57 3	12571 12329 12377 12546	42. 436 501
1216909	2	2	11035	4.2	461	1959	2	11035	4 . ∠	461	2	11255	440	2	11418	4.51
1216957	7 1	1	12500	4.2	529	1960	1	12500	4.2	529	1	13200	475			
1224123	3 1	1	11090	3.7	415	1959	1	11090	3.7	415	1	11450	413	1	11020	400
1235665	5 15	16	11833	3.9	459	1959 1960	11 5	12532 10714	3.9 3.9	478 414	10 5	12533 12530	484 470	10	12427 13565	
1239208	3 1	1	10470	4.0	417	1960	1	10470	4 . C	417						
1242/78	3 54	56	13088	3.6	475	1959 1960	43 13	12694 14579	3.6 3.6	461 520		122 <i>53</i> 128 <i>1</i> 9	47.5 496		12577 14170	
1249454	1	1	14640	4 ه د	491	1959	1	14640	3.4	491	1	14520	515	1	12066	402
1254663	3 1	1	10340	5.1	381	1959	1	10340	3.7	381	- 1	9960	444	1	10693	47)

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	DAUGHTER	AVERAGE	BA 211	₹L		К	ECORD AV	EKAGE I	34 21K	EBY	FRESHENING	TEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCI.		FRESH YEAR	RECORDS NO.	MILK LB.			305-UAY C RECURUS		FAT			FAT
							JER	sLY								
26390	3 7	22	7436	5.2	387	1947 1948 1949 1951 1953	15 2 3 1 1	9690 8467	5.2 4.7 4.7 5.0 5.1	456 401	1 1 1	7880 6460 8410	359	1	8110	436
33808	9 8	19	7016	5.3	366	1947 1948 1949 1950 1951	12 2 1 1 2 1	6739 7795 10720 10310 10990 10300	5.4 4.9 4.7	346 392 575 504 518 459						
35462	6 2	ц	6975	5.6	395	1947	4	6975	5.0	395						
37787	2 3	5	9758	5.3	520	1950 1956 1957	3 1 1		5.4 5.1 5.2	480 505 555						
37946	1 4	11	6155	5.3	327	1947 1948 1949 1950 1955	5 3 1 1	6947 5510 4240	5.0 5.2 6.0 6.0 4.8	365 331	ı	7410	349	1	7815	368
38341	2 2	ų	5624	5.4	303	1947 1948	3 1	5720 7400	5.3 5.2	303 368						
38461	1 1	1	6450	4.7	304	1947	1	6450	4.7	304						
38577	1 2	3	7043	5.3	37 2	1947 1949	2		5.3 5.0							
38859	1 26	84	6477	5.2	33 8	1947 1948 1949 1950 1951 1952 1953 1954 1955	12 14 13 15 9 5 7 3 5	6433 7064 6399	5.5	339 379 338	1 1 1 2 2 2 2	5660 8510 5650 6250 5450 7035 6325 7230	415 318 325 301 367 343	1 2 1	7695 7352 7597	378
38870	5 3	6	6325	5.6	355	1947 1948	5 1	6420 6600		365 359						
38902	8 23	67	7479	5.0	371	1947 1948 1949 1950 1951 1952 1953	35 7 6 5 6 2 2	7608 7771 8262 7258 8017 7435 7960 7270	4.9 4.9 5.0 4.9	377 381 400 361 392 361 375 285						
39283	4 2	3	5183	4.6	236	1947	3	5177	4.5	230						
39491	5 116	311	7317	5.0	365	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	13 30 43 51 57 53 28 16 9	7902 7417 7472 7209 7401 7815 8061 8692 8007	5.0 5.1 5.1 4.9 5.0 4.8	395 371 377 365 366 389 385 429 389	4 6 12 13 17 15 12 8 5 6	9003 7770 8531 7365 7935 7953 8175 8524 7886 8767	409 444 379 413 411 426 438 410 499		8061 7789 8147 8257 8008 8497 9352 9679	406 417 431 413 446 473
39490	3 72	218	6994	5.3	371	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 25 35 39 35 27 22 16 7 5 2	7616 7063 6899 6824 6943 6928	5.6 4.9	404 383 364 361 368 371 472 637	5 9 10 10 9 7 2	8078 7524 7517 7008 7300 8086	448 411 398 307 384 411 391 296	9 10 8 6 2 1		3+3 351 337 532
40103	6 5	17	6376	5.0	322	1947 1948 1949 1950 1951 1952	1 1 2 3 3 1	6950 6210 7507 6373	5.2 5.0 5.0 4.8 4.8 5.4	309 363 311	1	5120	245			

TABLE 15.--GAUGHTER-AVERAGE OF SINES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

25

					RDS FR		STATE ONL				MEN" MEAN					
	OAUGHTER	AVERAGE	BY SI	RĿ		F	ECORU AVE	RAGE E	BY SIR	Ł BY	FRESHENING					
SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		SOS-DAY (RECURDS NO.	ONTEMP MILK L8.	FAT L8.	YEARLY HE RECORDS NO.		
						1953 1954 1955 1956	JERS 2 2 1 1	6380 4350 7940 9810	5.3 5.2 5.3 5.3	335 230 424 515	1 1 1 1	6610 7900 6720 8080	339 389 364 425	 	7772 7379 7554 6856	397 364 378 364
401651	2	3	9888	4.7	469	1947 1954 1955	1 1 1	10360 9750 9080	5.0 4.5 4.3	521 441 391	1	6320 5350	346 265	1	6616	340
404365	4	7	7299	6.0	438	1947 1948 1949	5 1 1	7028 7100 8000	5.4 5.1	417 384 405						
404631	29	95	7325	5.3	388	1947 1948 1949 1950 1951 1952 1753 1954 1955 1956 1757	1 13 17 14 9 7 6 6 6 4 4 4	6917 7709 7352 7204 7974 7550 7323 7818 6785 809 7617	5.1 5.4 5.4 5.1 5.2 5.2 5.5 5.7 5.3 5.4	353 414 397 370 421 394 401 444 364 443 416	1 1 3 2 3 4 3 4 3 3 4 3 3	6630 7700 8240 7725 7547 7808 8503 7693 7587 8433	380 439 414 393 404 435 416 393	3	8266 7521 7779 8175 8716	401 407 431
405148	31	69	7617	5.3	400	1947 1948 1949 1950 1951 1952 1953	20 5 12 11 10 7 2	6764 7834 8136 8245 8637 7671 7695 7540	5.3 5.0 5.4 5.2 5.4 5.2 5.1 5.0	356 387 441 428 462 398 393 379	1 2 1	6590 7655 6840 7980	368 401 338 406	1		39 7 364
407251	20	43	7349	5.2	379	1947 1948 1949 1950 1951 1952 1953 1954	6 7 11 3 5 3 5 2	8960 7289 7593 7616 5872 7600 7958 9025 5980	5 · 1 5 · 2 5 · 4 5 · 1 5 · 3 5 · 0 5 · 0 5 · 0 5 · 0	457 375 401 391 321 385 395 442 315	2 3 2 2	6970 7537 6650 7705 6360	359 389 339 403 345	2 2 1		397 383 378
407913	11	26	6540	5.0	331	1947 1948 1949 1950 1951 1952 1953	15 2 1 1 1 2 1 3	6478 7630 6650 7180 6670 8595 8940 9067	5.3 5.2 4.4 4.3 4.0 4.9 5.1	344 393 291 308 264 423 453 441	1 1 1 3	4290 6810 9450 7260	219 296 457 382	1 3	7685 7797	4 1 4 40 7
409325	2	5	7772	5.5	420	1951 1952 1953 1955	2 1 1 1	8135 5960 6110 6530	5.5 5.2 5.5 5.6	444 307 335 363						
4 148 44	36	102	8286	5.1	421	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 4 4 10 9 18 10 11 2 4	7696 9465 7730 8528 7699 8763 8194 8716 8294 8343 8245 10848 8770	5.3 5.6 5.3 5.3 5.2 5.0	414 499 429 449 406 453 408 436 436 438 522 526	2 2 4 3 2 3	6885 7890 7338 7923 7110 7343	411 388 396	4 3 1 3	7750 7761 7554 7198 9330	401 394 373 304 479
416239	19	47	6455	5.6	361	1947 1948 1949 1950 1951 1952	23 9 5 3 3 3	6284 7448 6866 5497 5517 5677 5900	5.6 5.5 5.4 5.5 5.1 4.5	353 416 374 298 299 286 266						
419499	5	21	7484	5.6	415	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 3 3 2 4 2 2 2 1	7860 8287 7920 6095 7393 9345 8305 8065 9450 7430	6.1 5.6 5.5 5.4 5.3 5.3	418 474 452 371 406 505 445 421 503 382	2 1 3 2 2 2 1	9380 9870 7980 8037 8850 8205 7970 9800 10420	539 542 424 420 468 410 394 503 570	1 2 2 2 2 2 1 1	8404 8219 8464 7952 7974 9745 9429	408
421546	2	y	8701	5.1	438	1947 1948 1949 1950	2 2 2 1 1	8480 9730 7620 6070 5550	5.3 5.3	407 491 412 322 275						

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

26

-AUGHTER AVERAGE BY SIRE

				-												
SIRE NO.	UAOGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAK	RECUROS NO.		TEST PCT.	FAT L8.	SOS-DAY C RECORUS NO.		FAT	YEARLY HE RECORDS NO.		FAT
						1952	JER:		4.4	310						
43564	5 50	147	7957	5.1	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	12 9 25 19 10 17 16 13 9	7218 8111 7955 8595 8437 8409 8076 8508 7861 8183	5.0 5.2 5.1 5.1 5.0 5.1 5.0 4.9 5.0	362 419 402 433 414 425 410 425 386 410 341	1 1 4 3 6 5 4 2	8970 8420 8078 7647 7367 7268 6898 9545	425 471 430 398 382 381 340 448	6 5 3	7252 7637 7503 7543	401 377
43771	1 1	2	8235	5.4	445	1949 1951	1	8920 755 0	5.1 5.7	456 429						
43435	6 31	67	7365	5.5	403	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 9 9 14 13 8 7 1 2	8293 8308 7334 6992 6888 6659 7353 6850 7445	5.5 5.5 5.6 5.9 5.7 5.5 5.4 5.7 5.5	453 451 407 412 391 360 401 390 410 401	1 5 5 2 3 1	9550 7898 8120 8305 7220 7010 7900 6730			10301 7986 8415 8562 7957 6077 7723	577 410 434 438 429 431 420
44010	3 1	1	3480	4.5	156	1954	1	3480	4.5	156						
44072	3 4	17	6817	5.0	342	1949 1950 1951 1952 1953 1954 1955 1956	2 1 2 2 3 3 2 2 2 2 1	7460 8460 7210 6420 6457 5915 6460 6870 4390	5.2 5.3 5.3 5.3 5.0 4.7 4.7 4.6 4.8	385 447 386 338 322 275 300 315 210	2 2 2 2 2	6440 6485 7150 6560 5820	334 329 363 348 304	2 2 2 2 2	6224 6006 6823 6562 6562	329 312 356 340 337
44216	7 1	1	11030	4.3	502	1954	1	11630	4.3	502	1	8090	451			
44619	5 40	124	7467	4.9	366	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	10 23 23 18 18 11 9 4 2 2 2	7164 7181 8138 7371 7346 8779 8371 7783 7115 9510 8385 7595	5.2 4.9 4.9 4.7 4.9 5.3 5.2 4.6 5.1	369 355 395 350 357 417 408 410 372 435 423 339	1 3 4 4 4 5 5 3 1 2 2	6540 8057 8218 8265 7738 8703 7906 8263 7680 8150 7060 6790	402 442 435 415 462	5 3 1 2 2 2	8853 8550 8044 8230 8088 d077	453 462 429 437 444 431
44679	0 74	170	6773	5.4	368	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5 7 13 15 16 23 25 26 18 11 6 2	7967 6120 7473	5.6	514 554 416 408 383 352 374 394 395 364 437 344 381 396	2 3 4 5 10 10 7 6 2	9145 9497 8803 7988 7775 8011 7917 7668 7305 7040		5 10 7 6 1	8217 7719 7429 7688 8088 8077	410 387 403 444 431
44802	8 79	144	6729	5.4	360	1952 1953 1954 1955 1956 1957 1958 1959 1960	8 3½ 2½ 30 19 13 6	7735 6283 7170 6622 7499 6468 6498 6588 5510	5.3 5.5 5.6 5.6 5.5 5.3 5.1 5.3 6.1	414 344 389 371 412 346 325 347 336	2 10 11 16 13 7 2 3	8485 7522 8183 7672 8335 7760 7660 7420 6600	472 399 437 403 429 400 404 388	7 10 15 11 6 4 3	8213 7582 7852 7836 7826 8470 6001 7881	369 415 415 415 417
44905	8 1	2	5660	5.2	295	1954 1955	1	5810 5510	5.2	305 284						
45∠5 <i>1</i>	7 4	5	6758	5.0	341	1949 1950 1951 1952 1954	1 1 1 1	8000 6460 8150 803G 4600	5.2 5.4 4.9 4.7	412 350 399 374 215						
45532	5 50	127	7018	5.2	367	1948 1949 1950	5 17 19	6846 6513 7475	5.2 5.1 5.3	360 337 396	2	7340	435			

5.1

4.6

5.0

7/17

35:0

6B45

TABLE 15.--DAUGHTER-AVERAGE OF SIKLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

					RUS FR		STATE UNL			r. 24		W.C.1						
	DAUGHTER	AVERAGE	BY 51	RE		н	ECORD AVE	RAGE i	3Y 51K	E BY	E BY FRESHENING YEAR 305-DAY CONTIMP. AV. YEARLY HERD AVE							
SIRE NU.	DAUGHTERS NO.	RECORDS NO.	MILK L8.		FAT L8.	FRESH YEAR	RÉCURDS NU.	L8.	TEST PCT.	FAT LB.	RECÚRUS NO.	MILK		RECORDS NO.		FAI		
							JERS					11.70						
485170		1	8090		451	1954	l .	8090		451	1	11630 7520	502 372					
491731	32	65	7158) a 4	384	1952 1953 1954 1955 1956 1957 1958	5 13 19 13 8 4 3	7512 7591 6916 7415 7435 7770 6173	5.2 5.4 5.5 5.2 5.6 5.0	387 405 377 404 386 432 309	5 0 4 4 2	7520 9324 7855 8235 7435 8275 10400	508 421 434 402 445 558	4 6 4 3	8497 7854 8412 7936	459 427 450 421		
496088	10	36	7543	5.5	412	1952 1953 1954 1955 1956 1957	1 6 8 8 8 4	5690 8808 7679 7844 7704 7003 7890	6.3 5.7 5.8 5.0 5.5 5.4 5.4	420 492 438 434 426 383 425	3 4 4 2 1	7760 8237 7860 8820 8205 8260	403 435 401 436 410 411	2 3 4 4 2 1	7402 8310 8407 7826 7979 8611	391 440 451 391 407 444		
5023∠3	62	19	8478	5.2	442	1956 1957 1958 1959 1960	2 1 25 41 10	7650 8080 9031 8431 8355	5.0 5.2 5.2 5.2 5.2	383 421 463 439 432	1 6 29 3	8770 7660 8688 9023 8667	473 423 446 450 443	1 9 33	7935 7957 9306 9252 6862	435 415 474 403 401		
503200	45	56	7589	5.3	397	1958 1959 1960	17 34 5	7174 7707 5388	5.4 5.1 5.4	388 394 295	20 3	8038 8333 7547	40° 431 368	3 21 3	7721 8741 16686	397 450 485		
506697	1	1	8020	5.2	415	1959	1	8 0 20	5.2	415	1	6520	354	1	6736	₹48		
504853	60	76	7∳18	5.5	430	1957 1958 1959 1960	2 23 44 7	8440 8627 7749 7087	5.5	442 467 430 367	2 5 25 5	10970 8522 8008 7728	580 479 402 381	2 8 24 4	9374 8798 8702 9494	460 465 432 433		
512472	10	20	7699	5.0	379	1953 1954 1955 1956 1957 1958 1959	4 2 5 7 4 2 1	7110 6625 8570 7553 8150 6995 7430 8900	5.3 4.8 5.1 5.2 5.5	350 351 401 374 419 370 361 476	3 4 2 2	9083 8160 7785 8585	446 428 398 430	3 2 2	7910 9127 8333			
514415	11	21	7205	5.3	382	1953 1954 1955 1956 1957 1958 1959	3 4 3 3 1 2	6567 6928 7335 7320 8023 7670 8795 8720	5.2	345 361 404 414 433 448 473 515	1 1 2	6890 7090 8840	391 332 470	1 1	6802 6747 7739	326 343 407		
517082	1	1	5 3 6 0	5.5	295	1960	1	5360	5.5	295	1	8400	400	1	8219	393		
530279	21	33	8778	5.4	469	1956 1957	2	8315 9225	5.5 5.3	437 481	2	8940	466	2	8317	447		
						1958 1959 1960	13 13 1	9663 8407 10830	5.4	515 458 521	8	8569 8625	450 450	9	9180 8841			
531147	50	80	7428	5.1	377	1955 1956 1957 1958 1959 1960	7 15 14 19 19 6		5.1 5.0 5.3 5.2	427 369 396 397 330 427	3 7 2 9	8100 7773 8720 8228 7483	451	3 6 8 10	6856 7626 83d9 8111	429		
5377 32	145	214	7966	5.2	412	1955 1956 1957 1958 1959 1960	3 21 19 55 95 21	8403 7254 7508 8447 8179 8025	5.3 5.1 5.2 5.2	429 381 383 440 422 402	1 9 7 18 60 4	7870 8087 7957 8558 8427 6818	454 420 407 450 437 359	1 8 7 26 55 5	8164 7853 8197 8823 8953 10146	411		
546137	1	1	810	5.7	46	1960	1	810	5.7	46	1	4610	202	1	8240	462		
540648	3 - 3	1	7300	4.8	347	1960	1	7300	4.8	347				1	10922	445		
552844	1	1	5630	6.1	340	1960	1	5630	6.1	340	1	7240	409	1	8240	462		
552976	25	40	8140	5.2	422	1957 1958 1959 1960	1 16 21 2	10070 8212 8062 7320	5.2 5.2	594 427 422 354	7 13 1	9133 9284 7760	469 477 413	7 14 1	8840 9288 8535			
554291	33	52	8405	5.4	437	1958 1959 1960	1 o 28 6	8509 8077 7447	5.5	434 424 388	7 18 5	8629 8686 7424	450 446 387	14 19 5	9231 8855 8049	479 460 424		
261301	i I	1	8070	4.9	399	1960	1	8070	4.9	399	1	4790	276	1	8240	462		
565429	34	38	8185	4.8	388	1959 1960	28 10	8692 7538	4.7		21 3	8311 8413	465 444	23 4	9071 9004	465 457		

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIR.

RECORD AVERAGE BY SIRE BY FRESHENING YEAR

SIRE NO.	OAUGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	FRESH YEAR	RECOROS 140 e	MILK LB.	TEST PCT.	FAT LB.	305-0AY C RLCOROS NO•	MILK		YEAKLY HE RECURDS NO.	RO AVE MILK LB.	FAT
							JERS	ΕY								
56792	16	16	6461	5.5	356	1959 1960	11 5	6414 6566		358 352	6 3	7078 8973	365 452	7 3	8203 9258	
57191	2	3	6815	4.8	330	1959 1960	2	4880 8750		236 424	1	9490	453	I	9374 8546	
571912	2 13	13	6655	5.7	381	1959 1960	5 8	7890 5883	5.6 5.8	442 343	2 3	8705 6790	46 I 325	3 4	970 I 8734	496 452

29

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SURVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY DRUED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DADGHTER AVERAGE BY SIRE

					C 1 ×	e0.001	0. 6.10.11		TC: T					YEARLY HE		
SIRE NO.	DADGHTERS NO.	KECOKD2		TEST PCT.		FRESH	RECURUS NO.		TEST PCI.		RECORDS NO.	MILK LB.		RECORDS NO.	F8*	
NO.	40.	10.	LD.	,cr.	LOS	TLAK	140 *	LO.	rci.	LO.	140.	LD.	LO.	740.5	Lo.	E. L. o
							BROWN S	WISS								
4541	7 3	7	8707	4.2	384	1955	2	7020	4.1	298						
						1957	2	11420	4.7	532						
						1958	2	10880	4.3	463						
						1960	1	13020	4 . 7	616						
6542	1 1	ł	11370	4.0	451	1958	1	11370	4.0	451						
7074	7 8	14	9793	4.2	409	1955	2	8990	4.2	366						
						1956	2	11010	4.1	448						
						1957	2	9185	4.5	411						
						1959	24	10853		454						
						1960	žķ.	8918	4.2	377						
7605	9 1	1	9800	5.5	543	1959	1	9800	5.5	543						
7177	5 1	1	12050	4.2	508	1959	1	12050	4.2	508						
9123	4 2	2	10965	4 - 1	454	1959	2	10965	4 - 1	454						
9460	6 1	3	12600	3.8	476	1958	2	12330	3.8	466						
						1959	1	13140	3.8	496						
					(78.0)	1050				. 70						
10890	5 1	1	13410	4.3	578	1959	1	13410	4.5	578						
11359	4 1	1	11460	4.1	468	1959	1	11460	4.1	468						
12022	6 1	1	10480	4.7	496	1959	1	10480	4.7	496						

TABLE 15.--OAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

195B

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR 305-DAY CONTLMP. AV. YEARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. Lb. EB. NO. LB. LE. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. SIRE DAUGHTERS RECORDS MILK TEST FAT LB. PCT. LB. M. SHORTHORN 3460 4.5 3460 4.5 155 7850 307 7031 277 3.9 7960 3.8 7560 3.9 В 923B 3.7 337 3.8 1957 3.5 1959 9606 3.7 346 11510 467 3 11042 418 8121 3.8 303 ı 3.6 I 10213 375 3.0 9700 3.6 7640 3.7 276 7020 3.7 294 54≠0 13130 /641 11401 3.6 11910 4.0 7100 3.8 μ**7**3 1.3 8544 4.0 341 1950 7545 4.0 302 360 4.0 4.2 B340 4.1 7987 3.9 3.6 3.6 3.9 3.9 3.9 3.6 4.2 1956 7298 253 7612

3**7**8

NEW HAMPSHIRE

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVI _ IN ARTIFICIAL BREEDING ORGANIZA TONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.			FAT L8.	305-DAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							AYR 51	HIRE								
41058	3 2	8	9499	4.3	404	1947 1948 1949 1950	5 1 1 1	10094 10250 10840 7900	4-4	442 455 508 337						
40463	3 3	6	9017	4.3	391	1947	6	9017	4.3	391						
47885	3	3	6363	4.0	258	1948	3	6363	4.0	258						
48082	2 1	1	7370	4.1	301	1952	1	7370	4.1	301						
52394	3	19	8547	3.9	338	1949 1950 1951 1952 1953 1954 1955 1956	1 2 2 3 3 5 2 2 2	10040 7735 9263 8357 8070 8045 8185	3.8 3.9 4.0 4.2 4.3 3.6 4.2	312 398 293 365 335 340 341 317 450	2 2 3 3 2 2 2 1	8740 8393 9160 7710 7225 9780	329 331 347 345 368 311 302 419	3 2 2 2 2	8247 8311 7570 7450 9091	344 313 306 374
						1958	1	10500		439	1	9150	412	1	9756	412
53833	3 1	1	5650	4.5	255	1950	1	5650		255						
55033	3 10	26	7902	ti • fi	346	1950 1951 1952 1953 1954 1955 1956	7 8 6 1 1 1	8084 7699 8592 7890 11680 11710 11660 10886	4.3 5.0 4.0 4.6 4.2	359 339 366 393 471 541 490 486	1 1 1 1	11320 10170 7760 9640 9520 10260 9260	456 401 315 387 391 432 376]] !	8764 8764 9243 10279	348 348 387 433
57338	3 1	i,	8740	3.7	32∠	1953	1	8710	3.6	311	1	8710	377	1	9211	379
						1954 1955 1956	1 1 1	10420	4.1 3.6 3.4	358 374 244	1	8660 8810 10750	385 355 431	1	9788 9745 9 35 2	451 411 384
59047	7 18	50	8925	4.1	363	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 12 11 9 5 3 2 2 2 2	8919 9936 8746 9926 9547 8445 12590 11050 9220	4.2 4.0 4.0 4.0 4.0 4.4 3.8 3.6	504 371 396 342 390 387 373 474 402 311 312	2 2 3 2 2 2 2 2 1	9000 9480 9210 8400 9305 10165	377 375 367 334 409 421 411 435	1 1 1 1 1	6317 9112 9211 10290 9614 10824	353 379 372 414 411 448
61046	5 40	126	8878	4.0	353	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 24 19 22 14 15 12 3 4		4.0 4.0 4.0 4.0 4.0 4.1 4.1 4.1	380 348 368 346 353 309 296 417 367 349 318	2 3 5 8 7 6 8 2 2	7705 8147 8704 8921 8754 8020 7811 9130 8900	337 321 345 354 363 329 314 381 354	7 7 8 1 2	8369 8150 7535 8491 9358	335 335 305 352 374
6157	1 1	6	13213	4.2	554	1950 1952 1953 1954 1955	1 1 1 1 1	12960 12230 13430 12980 14060 13620	4.2 4.3 4.3 4.3	528 515 579 552 608 544	1 1 1 1	6010 10370 10850 9080 10170 9170		1	9897 10998 9243	405 464 387
62198	8 4	10	8931	4.1	365	1949 1950 1951 1952 1954	3 1 2 1	10460 7090	4.6	403 424 272 364 257	1	9760 9620	39 <i>5</i>	1	7467	330
6223.	3 18	52	9464	4.1	385	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 9 12 10 7 7 7 1 2	8055 8774 9788 9865 9914 9664 9660 10320 8490	4.2 4.1 4.0 4.0 4.0 3.7 3.8 3.5	330 365 407 395 405 384 361 390 300 376	1 6 8 6 5 6 1 2 1	8180 9228 9214 9805 8916 9177 10140 9905 9490 10190	316 381 382 404 377 375 405 436 383 395	7 5 4 6 1 2 1	8686 9121 8644 9064 10006 9145 9330 9592	365 380 354 370 467 384 379 386
6261.	3 12	19	7840	4.1	321	1954 1955	6	7845 7810	4.2 4.1	528 321	14 14	9048 9175	387 392	3 4	9337 8535	403 356

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SLRVICL IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

33

DAUGHTER AVERAGE BY SIRE

	DAOOMIEK	ATLKAUL	01 311	\L		"	LCORO AVI	LKAUL L) 1 3 I K	LUI	I KESHERING	ILAK				
SIKL NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		1EST PCT.		305-DAY C RECORUS NO.	MILK	AV. FAT LB.	YEARLY H RECORDS NO.	MILK LB.	FAT
						1956 1957 1958	AYRSI 3 2 1	8157 7905 9750		345 369 373	2 2 1	87o0 8940 10970	370 358 453	2 2 1	8884 9530 11227	374 389 459
63144	, 12	30	8044	4.2	340	1951 1952 1953 1954 1955 1956	4 7 6 4 0 2	9235 7500 8378 7978 7372 7155 9560		387 319 359 342 313 302 432	3 4 2 4 2 1	8660 8648 0535 8465 7800 9390	349 337 314	4 1 4 2 1	8521 9243 8508 7450 9091	339 385 347 306 374
63147	? 117	229	9680	4.1	392	1953 1954 1955 1956 1957 1958 1959	5 22 34 43 30 34 52	9600 9830 9161 9428 10725 10748 9981	4.1 4.0 4.0	401 397 375 382 430 431 397 435	4 15 28 37 27 31 51	8995 9247 8949 9492 9783 10115 9650 8870	398 382 377 384 398 412 392 380	3 12 25 34 25 31 50	9494 8790 8697 8919 9458 9902 10178 11093	409 372 353 368 365 404 414 459
63426	30	61	82/4	4.2	347	1952 1953 1954 1955 1956 1957 1958	7 17 18 13 7 5 2	8129 8513 7957 8342 7413 7897 9080	4.1 4.2 4.2 4.4 4.2 4.2 3.9	329 353 334 362 313 333 345	3 10 10 11 5 3	9467 9241 9247 9069 7790 9710		7 9 10 5 3	8544 8686 8746 8328 9425 11412	35.3 36.1 36.0 34.8 39.0 46.0
64885	5 7	25	8895	4.0	359	1950 1951 1952 1953 1954 1955 1956	1 4 5 5 4 4 5 1	9710 9005 9453 9504 9370 8520 8450 7230		450 370 369 361 370 350 346 260	2 2 3 3 3 3 2	9530 9465 9277 10387 10207 9895 8580	3 7 3 385 431	2 2 1 2	9107 10055 8448 9767 9330	379 422 359 420 389
65548	3 1	9	11770	3.8	448	1950 1951 1952 1953 1954 1955 1956 1958 1959	1 1 1 1 1 1	13450 11950 8450 11240 9990 13640 11450 14350 11410	3.9 3.3 3.7 3.8 4.3 4.3 3.6 3.7	520 390 317 416 383 581 495 516 417	1 1 1 1 1 1 1 1 1	10800 9970 7260 9070 8240 9510 8540 11060 11630	290 361 352 412 356 442	1 1 1 1 1	3567 8764 8764 9243 10290 11303	352 348 348 387 405 446
67174	12	39	9254	3.9	364	1951 1952 1953 1954 1955 1956 1957	5 9 7 6 3 3	10930 9550 8858 9487 10167 8240 8727 8350	4.0 3.9 4.0 4.1 3.9 3.1 3.7	434 375 345 384 412 327 324 306	2 2 5 4 3 2 2	10415 7840 9134 8690 9867 10095 8025 7500	428 346 375 370 425 422 334 320	6 3 2 3 2 1	9214 9509 8764 9658 8857 3317	372 367 348 401 368 357
67576	6	19	8462	4.5	37 (1949 1950 1951 1952 1953 1954 1955	4 2 2 4 3 2 2	8958 7505 7970 7783 7973 7360 7415	4.6 4.2 4.4 4.5 4.4 4.2	415 318 350 352 351 367 309	1 1 1 1 1	8090 7890 7970 8540 7650 7020	312 299 299 331 317 286	1	8142 73 7 9	308 302
68188	3 5	9	6730	4 - 1	278	1950 1951 1952 1953 1954	4 2 1 1 1	7160 7270	4.2 4.4 4.1 4.4 4.2	292 319	1 1 1	12430 12480 9380 9700 9500	403 411	1	8458 9243	
70104	1	1	9820	3.9	383	1953	1	9820	3.9	383						
70259	7	10	8186	4.3	349	1954 1955 1956 1957 1958 1959	4 4 4 2 1	9360	4.3 4.5 4.1 3.7 4.3 4.0	351 346	4 3 2 1	8935 8290 9267 10720 9650 8420	369 345 369 431 402 349	4 4 3 2 1	7677 9476 9494	
70368	3 4	12	8702	4.0	352	1952 1953 1954 1955 1956 1958 1959	1 3 2 3 1 1	10650 9193 8360 9420 9710 9410 12500	4.4 3.9 3.8 4.3 4.5 4.1 4.0	472 361 319 407 435 382 494	1 2 1 3 1 1	10030 9950 9690 9130 9430 11530 11580		2 1 3 1 1		357 348 300 352 463 423
70760	0 15	43	9320	4.3	395	195 <i>2</i> 1953 1954 1955	2 11 9 7	10375 9606 9170	4.5 4.4 4.2	445 419	2 9 6 5	3965 8920 8803 8886	379 364 360	9 6 4	8473 8787 8565	350 360

New HAMPSHIRE

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	OAUGHTERS	RECOROS NO.		TEST		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305+DAY RECORDS NO.			YEARLY HECOROS		
							AYRS									
						1956 1957 1958 1960	7 5 1 1	8699 9748 9760 9920	4.3 4.2 3.6 3.5	370 410 350 347	6 4 1	8767 9670 10820 8710	358 410 426 356	6	8319 9884	346 411
7119	1 14	28	7 534	4.0	30 3	1950 1951 1952 1953 1954 1955	1 5 9 8 3	6490 7834 7643 8504 6427 7160	3.9 3.8 3.9 4.0 4.2 4.1	254 298 299 342 265 292	3 5 6 2	9327 8072 8400 8355	354 346 356 328	6 2	8117 7537	342 318
						1958	i	9030	4.5	406	1	10590	476	1	10290	451
7116	3 15	35	8485	ł4 ₀ ł4	372	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 8 4 4 3 3 1	9390 8599 8618 8413 8680 7830 7867 10770 8960 11700	4.4 4.4 4.4 4.7 4.5 4.0 4.3 4.7	413 376 381 373 401 359 327 468 419 506	3 4 2 2 2 3 1 1	8277 9408 8715 8230 7935 7510 9980 10600 9640	339 385 372 337 319 302 429 475 425	2 2 2 3 1 1	8551 8311 7570 7964 9091 10290 9810	371 344 313 328 374 451 426
7329	3 20	31	9034	4.1	378	1952 1953 1954 1955 1956 1957 1958 1959	1 8 5 12 2 1 1	11080 8653 8776 9132 11200 9930 10670 8890	3.6 4.1 4.3 4.3 3.9 4.2 4.1 3.9	399 355 373 396 431 417 433 345	8 4 8 2 1	9634 9105 9788 9250 9330	406 389 409 3 7 9 385	8 4 6 2 1	8781 9001 9407 9211 10279	368 382 382 385 433
7402	1 47	84	9536	4.2	397	1953	2	9505	4.3	404	2	8835	409	2	11576	504
1402	. 41	04	7330	4.2	371	1954 1955 1956 1957 1958 1959	1 9 11 9 12 30 4	8839 7822 8896 9178 10423 10036 10588	4.2 4.2 4.1 4.1 4.2 4.2	372 329 361 374 430 420 431	6 10 9 12 27	8345 9548 10283 9883 10039 9132 9728	353 389 422 407 409 372 404	6 5 10 9 12 28	8818 9204 9704 9511 10103 9911 10459	372 370 401 391 407 406 425
7453	5 2	3	10275	4.1	423	1957 1958 1959	1 1 1	10830 9930 10170	3.8 4.2 4.2	409 418 432	1 1 1	11350 11550 10970	442 461 425	1 1 1	10290 11183 10856	414 433 425
7661	3 36	97	9241	4.1	379	1952 1953 1954 1955 1956 1957 1958 1959 1960	2 14 21 18 13 10 8 10	9875 9476 9246 9641 9445 9607 9403 9746 620	3.6 4.2 4.2 4.1 4.0 4.0 4.1 5.1	355 397 385 401 390 388 376 403 32	1 12 18 17 13 10 8 10	10000 9396 8841 8752 9221 9676 9600 10003 1800	434 394 367 365 375 396 404 414 66	11 15 16 13 10 8 10	8980 8642 9093 8929 9310 9564 9756 8796	376 360 381 369 380 393 399 359
7 683	1 3	11	9194	4.3	393	1950 1951 1952 1953 1954 1955 1956	3 1 2 1 1 1	9077 11750 9010 10560 10590 9760 11680 12090	4.3 4.6 4.4 4.5 4.4 4.3 4.1	391 539 401 479 462 418 485 570						
7742	i, i,	14	9101	4.3	396	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 1 1 3 2 1 1 1 1	7770 9030 10190 9003 8715 10380 11080 13950 10890 10760 15580	3.8 4.6 4.6 4.6 4.0 4.5 4.3 4.2 4.2	294 413 465 412 401 414 499 598 461 449 647	1 1 2 1 1 1 1	11590 10190 9040 8130 8780 9550 10160 9300 10890 11410	407	. 1	8644 8764 8764 9243 10279 9559 11303	376 348 348 387 433 386 446
7811	ц 8	14	9107	4.2	379	1954 1955 1956 1957 1958 1959	2 2 3 5 1	7355 11395 8683 9618 12130 11150	4.3 4.4 4.1 4.2 3.8 4.1	309 493 368 406 462 454	1 2 5 1	7570 11105 9770 10656 13490 10050	328 458 405 436 541 399	 1 2 4	9243 8460 9129 9720	385 356 373 398 472
189∠	7 1	1	10 170	4.3	437	1959	1	10170	4.3	437	1	9380	381	1	10093	410
7918	6 1	2	9200	3.8	347	1955 1956	1	9710 8690	3.8	370 323	1	9970 10480	405 414	1	9788 9536	403 385
1931	4 1	1	10650	ц.ц	475	1959	1	10850	4.4	475	1	7690	323	1	8088	337
8057	9 19	29	9264	4.0	370	1956 1957 1958 1959 1960	2 4 11 9 3	10805 10760 9751 10159 7827	4.4 4.2 4.0 3.9 3.8	472 454 386 395 299	2 4 11 9 3	10630 10358 9999 9932 8143	474 438 405 410 339	2 3 10 9	9254 9272 9716 9676 8796	395 374 397 402 358
8262	0 4	5	11710	4.1	474	1959 1960	3 2	11950 11905	3.9 4.2	465	2 2	11190 10440	456 416	3 2	10609 10432	434 422

TABLE 15.--DAUGHTEX-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

35

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.	MILK		FAT	FRESH	RECORDS		TOCT	F . T	RECORDS	MILK		YEARLY HE		
NO.	NO.	м0.	L8.	DOT				MILK	TEST	FAT	RECURDS		FAT	RECORDS	MILK	
				PLI.	L8.	YEAR	NO.	L8.	PCT.	L8.	NO.	L8.	L8.	NO.	L8.	LE.
							AYRSI	HIKE								
82628	B 11	27	8886	4.2	368	1955	2	7410	4.2	309	2	9205	387	2	3186	349
						1956	Ó	8320	4.3	355	5	4528	389	5	9150	372
						1957	6	9755	4.2	405	6	10138	419	6	9291	363
						1958	7	9944	4.3	419	6	10872	453	6	10893	449
						1959	5	8024	4.0	314	5	100/4	410	4	10453	424
						1960	1	8080	4.2	339	1	10230	395	I	9592	306
8422	3 1	1	10990	4.0	438	1959	1	10990	4.0	438	1	11710	490	1	10584	441
86390	0 60	73	8904	4.3	381	1956	4	7583	4.5	323	3	9333	378	3	3952	372
						1957	16	8354	4.5	372	15	9667	379	15	9405	303
						1958	11	11048	4.2	461	1.1	10536	424	1.1	9972	401
						1959	30	9174	4.3	393	30	97/3	402	29	10155	418
						1960	12	8745	4.1	362	12	8874	365	7	10017	411
86898	36	61	8542	4.0	344	1954	4	8773	3.9	338	2	9925	412	2	გ557	363
						1955	20	8431	4.1	341	12	9197	386	9	8787	358
						1956	14	8735	4.0	348	1.1	9128	37 I	11	8921	368
						1957	10	8489	3.9	354	7	9467	39 8	7	9295	384
						195 ម	7	9516	4.1	594	6	9673	397	6	9837	402
						1959	5	9070	3.8	347	5	9302	376	5	9145	303
						1960	1	4590	4.0	175	1	5460	209			
91298	3 1	1	8200	4.4	358	1955	1	8200	4 . 4	358	1	10400	438	1	8764	348
91883	3 17	17	9829	4.2	409	1959	14	9846	4.2	410	13	10438	424	12	10076	401
						1960	3	9747	4.2	403	3	10107	419	3	10119	418
9225	1 1	1	8840	5.9	346	1954	1	8840	3.9	346						
9442	3 4	14	9168	4.4	399	1959	2	7640	4.5	342	2	9575	398	2	10802	448
						1960	2	10695	4.3	456	2	10180	392	2	9592	306
95381	4 23	29	9440	4.3	404	1958	6	9315	4.4	404	5	10064	409	5	9967	404
						1959	16	10099	4.2	425	16	10269	433	14	10055	416
						1960	7	8590	4.2	362	7	3237	337	6	9501	347
99039	9 1	1	9380	4.3	404	1959	1	9380	4.3	404	1	10110	401	1	11750	472

TABLE 15.--DAUGHTER-AVERAUE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO+		TEST PCT.		305-0AY C RECGRDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							GUERA									
19736		1	5520		290	1948	1	5520		290						
22649	7 1	Ų	9188	4.5	412	1949 1950 1951 1953	1 1 i 1	7750 11550 8290 9160	4.2	415 482 319 431						
23776	1 36	100	7641	4.7	359	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5 11 15 19 12 11 9 9 4 3	7749 7989 7874 6826 7234 7762 7436	4.8 4.7 4.8 4.6 4.6	369 370 358 382 356 310 332 345 342 438 476	1 1 3 4 6 2 6 3 3 2	8550 8460 8370 8973 8055 7745 7855 3067 8737 9800 8525	371 374 438 392 347 355 374 421	5 6 2 6 3 2 2	8439 7650 8050 8186 9890 8796 8960	370 346 364 382 471 420 425
25088	3 1	3	8223	4.8	396	1948 1950	2 1	7890 8890	4.9 4.7	384 42 1						
25693	5 1	2	7950	4.8	383	1952 1953	i 1	9010 6890	4.8 4.6	437 328						
26009	0 1	5	6676	5.2	343	1947 1948 1949 1950 1952	1 1 1 1	5910 5720 7750 7650 6350	5.2 5.1 4.9 5.2 5.4	308 293 379 394 341						
26658	3 2	2	7/75	5.0	380	1955 1956	1	9140 6410		414 346	1	9320 7210		1	6251	370
27098	В 3	7	7607	5.2	396	1949 1950 1951 1952	3 2 1 1	8260 7410 6220 7240	5.1 5.7 4.7	420 373 354 340						
27505	6 1	1	7170	5.0	351	1956	1	7170	5.0	357						
28069	1 8	12	7441	4.9	363	1948 1949 1950 1953 1954 1955	4 2 1 1 2 1	9280 8555		361 374 365 466 411 359 348	1 1 1 1	7950 7380 8140 8530	366 323 361 402	1 1 1	8785 8546 7499 8099	
28 77 4	9 4	8	8446	4.6	390	1951 1952 1953 1954	2 4 1 1	8423 9160	4.3 4.9 4.1 4.4	403 413 379 404	1 2 1 1	8500 8720 8390 8420	396 410 397 413	1	8993	449
28924	4 108	253	8312	4.6	379	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 32 50 47 41 29 27 11 13	8610	4.7 4.6 4.6 4.5 4.5	350 406 378 376 396 389 381 367 429 458	1 12 37 41 36 26 22 7	6510 8958 8678 8914 9053 9569 10195 9894 9359 10450	376 379 386 397 417 447 424	35 35 37 26 22 6	8437 8557 8977 9184 9940 10473 9623	373 394 400 423
29622	4 19	45	8627	4.6	391	1952 1953 1954 1955 1956 1957 1958 1959	2 7 13 7 8 3 3	8945 9371 8695 7537 8237	4.6	350		8920 8659 8716 9376 10131 9520 9795 9045	365 403 431 405 409	6 11 5 7 3 2 2	8088 8506 9067 9539 10493 9870 9080	370 393 394 415 425
29916	5 ì	3	7557	4.8	366	1954 1955 1956	1 1 1	7170	4.9 5.1 4.5		1 1 1	10050 9310 9160	426	1 1 1	7935 7804 8785	356
29920	6 I	i O	6915	4.7	323	1947 1948 1949 1950 1951 1952 1953 1954	2 1 1 1 1 1 1 1 1 1	5490 5260 8400 8990 7180 6960 8270 7690	4.8 4.6 4.7 4.8 4.6 4.8 4.8 4.8	262 242 392 431 332 333 390			316 399 429 418 403 375 363 388	1 1	8567 8349 9788	362 351
30020	8 19	57	7868	4.8	380	1952 1953	3 14		4.8		2 11			11	8408	379

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	UAUGHTER	AVERAGE	8Y 51	RE		н	ECORD AVE	RAGE	BA 21K	E 01	FRESHENING					
IKL NO.	DAUGHTERS NU.	NO.				FRESH YEAR	RECUKOS NO.		TEST PCT.		305-DAY RECORDS 10.		FAT	YEARLY HI RECORUS NO.		FAI
						1954 1955 1956 1957 1958 1959	GUERN 10 8 9 7 5	8146 8666 0216 7740 8510	4.9 4.7 4.9 4.5	393 418 388 383 411 517	9 0 8 6 5	8590 9365 3916 9275 8990 9100	405 402 392	7 8 9 7 4	8178 9510 8549 9154 9314	41 39 41
803185	3	5	9031	4.7	419	1949 1950 1956 1957	1 2 1 1	7590 6875 9920 10060	4.9 4.4	384 335 435 470	1	11450	505	1	11467	4∠
12690	19	32	1368	4.7	348	1952 1953 1954 1955 1956 1957 1958	5 11 8 3 3 1		4.0 4.7 5.0 4.6 4.6	328 371 356 412 413 452 248) 6 1	6610 7912 7062 10300 10080	337 409	3 4 1 1	7979 7570 9783 9538	33 40
313279	12	32	6939	5.0	334	1949 1950 1951 1952 1953 1954 1955 1956	2 6 4 4 2 3 2	6480 7348 6410 7290 7943 7173 6895 8657 0155	4.8 5.2 5.0 4.6 5.1 5.0 4.8	340 347 327 358 377 363 343 410 359	2 3 2 4 4 2 3 2		386 396 362 372 390 467	4 4 2 3 1	8671 8028 7123 8084 9170	41 37 36 40 47
516271	2	6	7437	4.9	363	1952 1954 1955 1956 1957	1 1 2 1	6960 9140 8520 7370 6020	5.2 4.9 5.2	374 479 414 385 313	1 2 1	12970 10465 11040 10090	412 446	1 2 1	12132 10224 10726 10137	37 43
316996	ì	5	8844	5.3	464	1954 1955 1956 1957 1958	 		5.3 5.8 5.3	431 555 512 416 405						
31696B	34	71	8142	4.7	383	1953 1954 1955 1956 1957 1958 1959	1 17 13 13 9 6	5580 8601 7728 8281 7810 8301 8133	4.6 4.7 4.7 4.7	393	1 7 15 17 10 6	9730 9519 9439 9248 9564 10250 9790	411 400 400 406 446	1 7 14 17 11 7 6	8567 8770 9309 8818 8658 9626 9856	38 39
3208 7 3	1	5	7836	4.7	369	1952 1953 1954 1955 1956	1 1 1 1	8470 7880 7460 8660 6710	5.1 4.2 4.8	408 402 317 419 301	1 1 1 1	7520 6750 6630 7820 7670	298 378	1 1 1	7565 8426 7728	
324096	1	1	5900	5.1	302	1952	1	5900	5.1	302						
324250	2	5	7603	5.2	396	1950 1951 1953	3 1 1		5.3 5.3 5.5	402 421 344						
333456	2	7	7398	4.6	339	1953 1954 1955 1957 1958 1959	1 1 1 1 1 2	7100 7130 5690	4.2 4.4 4.5	316 284 298 250 328 384	1 1 1 1 2	6230 7270 6720 7040 8260 8530	305 285	1	6813 6202 6954 7227 8873 8764	27 30 3
334282	1	1	5330	4.2	226	1957	1	5330	4.2	226						
334413	12	19	7987	4.3	341	1954 1955 1956 1957	5 6 4 1	6866 7997 8090 9260	4.3	293 340 328 374	3 3 3	8257 9246 8780	364 411 384	3 4 3	7855 9216 8847	36 38
						1958 1959 1960		7330 8860	4.5	512 331 446	1	9240 10490 13940		1 1 1	10344 9472 11336	
335302		1	8400			1950	1	8460		399						
336058		1	5770		258	1954	1	5790		258						
336595	9	18	7729	5.2	400	1949 1950 1951 1952 1953	3 6 3 2	7647 7137 8778 7640 9090	5.1 5.1 5.2 5.1	419 360 446 398 464	1	6730 6920	296 306	1	7685	
336990	1	3	6015	4.5	272	1954) !	7260 6510	4.5	323	1	7570 8170	356 386	1	7695	
						1953 1954	1	5480 6050	4.4	256 267		7360 6770	366 304	1	7565	3
337117	2	3	6170	5.5	334	1950 1951 1956	 	6650 4390 6820	6.0	401 263 336	1	3 900	379	i	9516	3

TABLE 15.--CAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

3.8

TABLE 15.--GAUGHTEK-AVERAGE OF SIRLS IN SURVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	KECOROS		TEST PCT.	FAT LB.	FRESH YEAR	KLCURDS NU.		TEST PCT.	FAT LB.	KECORDS NO.	CONTEMP MILK Lo.	FAT Ld.	YEARLY H KEGORDS NO.	MILK	
						1957 1958 1959	GUER 2 1 1	8005 10010 10500		402 528 529	2 1 1	9y75 10c30 10c10	435 505 502	2 1 1	9570 10573 10846	477 514 565
40400	3 31	71	7490	4.7	351	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 4 10 12 10 10 10 10 2 1	9400 8115 7488 7786 7655 7679 8155 7738 7385 4700 490	4.0 4.8 4.9 4.7 4.7 4.6 4.6 4.6 4.6 5.2	432 384 364 363 371 357 374 370 342 201 26	2 7 10 7 9 10 2	7035 3207 3056 8749 8300 8948 10202 9850 7800	352 404 370 396 396 391 425 391 294	8 7 8 9 10 2 1	8296 6455 8942 8809 9144 10023 7783	354 389 384 385 394 402 313
40445	4 1	i i	8130	4.5	361	1954	1	8130	4.5	307	1	9460	395	1	6349	3 > 1
41793	9 11	21	7504	4.6	342	1952 1953 1954 1955 1956 1958	6 9 4 3 1 2	7462 6660 7720 7693 8740 9165	4.6 4.5 4.6 4.3 4.2 4.4	342 304 360 330 367 405	1 3 2 1	8880 8235 8533 6110 7390 8400	378 379 361 394 331 403	4 2 1	8065 8426 7728 8873	398 372 417
42067	2 3	14	8287	5.0	422	1952 1953	2	7505 9175	4.6 5.2	359 479	1	3920 3680	370 398	1	8567	362
43197	2 5	5	7876	4.3	338	1957 1958 1959	1 2 2	7900 8315 7425	3-7 4-2 4-7	305 350 343	1 2	6000 8200	2d9 352	2	8306	367
447, 7	7 2	3	8303	4.7	385	1958 1959	1 2	8 59 0 8 05 0	4.7	420 373	1 2	9510 9720	384 385	1 2	9396 9330	368 379
46239	8 5	8	7949	5.0	395	1955 1956 1957 1958	4 2 1 1	8130 6950 9720 10280	5.1 5.3 4.5 4.5	411 363 441 463	4 1 1	8848 9160 12200 10750	411 414 515 430	4 1 1 1	7652 8785 9036 10148	350 401 412 434
46455	6 10	10	7317	4.7	349	1958 1959	1	7510 7296	4.2 4.8	316 352	В	9225	409	6	9314	4,8
465/8	0 в	18	9112	4.5	404	1954 1955 1956 1957 1958 1959 1960	14 14 5 14 1	9288 9365 8497 10006 14940 8290 9520	4.5 4.5 4.5 4.0 4.4 3.8 3.9	402 416 379 449 656 317 368	14 3 4 1 1	9550 8903 8810 10820 14470 7580 12610	395 372 374 460 555 337 462	4 5 3 4 1	9728 9734 9585 10154 13756 oz40	412 401 378 445 547 378
47250	5 1	1	6830	4.4	301	1959	1	n830	4.4	01د	1	10150	397	1	9330	379
47850	6 17	29	8341	4.6	384	1955 1956 1957 1958 1959 1960	3 6 3 6 8 3	8453 8755 6687 8688 9606 9123	4.7 4.4 5.0 4.5 4.5	402 404 294 430 433 403	1 3 2 4 7 3	12210 9610 9065 9598 9564 10270	475 406 406 406 392 510	2 4 2 4 7 2	8361 9478 6110 9295 9366 10312	407 407 306 400 395 420
48076	7 3	3	8983	4.6	412	1958 1960	2 1	10175 6600	4.6 4.5	4 7 2 294	2 1	10590 9280	474 665	2	9341 11031	402 453
49639	4 2	2	7945	4.7	377	1958	2	7945	4.7	577	1	9510	443	1	10344	462
50674	3 3	3	7780	4.4	345	1957 1958	1 2	9540 6900	4.3 4.5	408 314						
50558	3 1	1	6570	4.6	304	1959	1	6570	4.6	304	1	1 260	387			
50767	6 2	3	5935	4.0	238	1959 1960	2	5810 5910	3.9 4.2	226 246	2	8a 15 9060	372 358	1	7783 7477	313 295
51451	5 1	1	10420	4.4	463	1960	1	10420	4.4	463	1	10190	393	1	959 2	336
51486	5 1	1	9550	4.6	436	1959	1	9550	4.0	436	1	7880	388	1	8827	424
51947		1	8250	4.5	371	1960	1	8280	4.5	3/1	1	9130	659	1	10747	435
51947	3 1	1	7850	5.1	400	1959	1	7850	5.1	400	1	10140	396	1	9330	5/9

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUGHTERS NU.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	K_CORDS	MILK L8.		FAT L8.	305-DAY (RECORDS NO.			YEARLY HI RECORDS NO.		FAI
							HOLS	TEIN								
658978	3 I	2	9155	3.5	318	1947	2	9155	3.5	318						
680074	+ 1	8	12156	3.6	430	1947 1948 1949 1952 1953 1954 1955	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12240 14710 11490 10370 13410 11330 12890 10810	3.5 3.4 3.2 3.4 3.7 3.7 3.6 3.9	426 494 369 348 500 420 463 422		12450 12840 12650 11380 10440 11710 12940	449 447 396 413 373 448 487	1 1	13832 10791 10551 12372	
695641	+ 2	2	10990	3.9	395	1951 1952		5490 16490	4.3 3.4	235 555						
697696	5 1	2	11425	3.4	389	1947 1948	1	11230 11620	3.4 3.4	385 393						
705343	3 23	57	9136	3-8	344	1947 1948 1949 1950 1951 1952 1953 1954	17 11 11 4 5 1 4 2 2	8377 9450 9694 9175 8022 10260 12113 12000 10575	3.6 3.8 3.8 3.7 4.0 3.9 3.9	306 362 371 346 292 414 470 463 379	1 2 1 3 2 2 2	9960 11960 9630 12170 14223 12540 9435	349 412 293 435 514 463 344	3 2 2	11543 12635 12230	420 467 456
/30516	5 3	9	10026	4 - 4	436	1952 1953 1954 1955 1956 1957	1 1 2 3 1 1	9950 12140 10870 9837 10310 11260	4.2 4.4 4.2 4.3 4.2 4.6	421 531 460 422 434 522	1	17170 15290 12910 12100 12400 14750	619 530 468 443 458 570	1 1 1 1	7946 10900 13658 12633 13592	348 452 503 481 499
743063	3 3	4	12570	3.6	454	1948 1949 1952 1953	1 1 1 1	13910 8890 14610 15210	3.4 3.5 3.8 3.9	472 310 559 600						
748046	6 1	4	11348	3.5	397	1950 1951 1952 1953	 	13750 10950 8320 12370	3.2 3.7 3.4 3.7	443 401 287 458						
748047	7 1	1	11340	3.1	355	1948	1	11340	3.1	355						
750258	3 30	88	11951	5.7	439	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 14 11 7 10 14 9 11 6 3	11540 10820 11001 10995 12006 12646 12832 12421 13185 15210 14537	4 · 2 3 · 6 3 · 7 3 · 6 3 · 7 3 · 8 3 · 8 3 · 8 3 · 8 3 · 8 3 · 7 3 · 8	485 388 410 402 442 472 486 470 496 558 542	1 6 9 11 7 10 6 3	10730 10571 10390 10353 11208 11082 11597 12972 13538 13447	382 407 414 394 416 425 436 500 512 533	6 9 10 6 11 5 3	10731 11319 11309 10733 12612 12921 12949	393 419 415 405 484 501 505
758840	5 57	145	11135	3.7	411	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	3 11 23 21 16 20 12 12 10 5	11177 10889 10738 11702 11190 11274 12477 12328 12343 12812	3.6 3.7 3.7 3.7 3.6 3.6 3.5 3.5	396 417 397 431 408 408 455 434 436 453	3 5 9 9 14 10 11 8	11330 10068 10882 10994 11402 11614 11304 11481 12000	396 351 398 396 414 430 421 425 449	6 10 10 11 7 3	9852 11126 11126 10444 10961 12077	356 400 405 391 401 451
760679	9 5	6	12512	3.6	456	1947 1948 1949 1950	1 2 1 2	16290 14945 12430 8990		585 543 430 332						
76463	2 1	5	13004	4.0	525	1951 1952 1953 1955 1956	 	12770 12230 15790 13670 10560	4.3 4.0 4.0 4.0 3.9	552 405 632 546 409	 	10420 11800 12800 13160 12770	391 460 476 470 479		11968 13124	
763460	0 2	4	10255	3.9	394	1949 1951 1954 1955	1 1 1 1	8400 9610 10580 12430		304 354 417 501						
76886	6 2	7	13024	4.0	521	1951 1952 1953 1954	1 2 1	11360 14240 11346 13180	4.2 3.9 4.3 3.7	479 548 483 490	2 1	13000 12435 10850 14420	436	1	13396	475

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING OR ANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8Y 51	RE		н	ECORO AVE	ERAGE	BY 516	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	KECOKDS NO.		IEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-0AY RECURDS		- A√- FAT LB-	YEARLY HORECORDS	AND AVE	RAGE FAT LO.
						1955	H0LS1	TEIN 13120	4.3	549	2	120∠5	4 3 I	2	13097	477
77238(53	146	11636	3.6	421	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	13 26 17 20 17 18 11 13 10	10644 10870 11161 11554 12020 12619 13539 13565 13044	3.7 3.7 3.6 3.6 3.6 3.5 3.6 3.7 4.0	395 398 403 416 436 447 485 490 485 709	2 13 14 18 15 15 10 13	11095 10806 11061 10917 11177 11335 12263 12456 12625 13160	462 404 418 403 423 430 473 479 495	14 15 11 14 10 10	10759 10921 10892 10937 11450 12546 12452 12895	411 410 405 416 444 433 432 434
775869	22	41	10480	3.6	38∠	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 6 7 8 3 4 5 2 1	8085 10849 10670 10789 11637 11613 11982 15970 15150 7800	3.7 3.8 3.8 3.6 3.5 3.6 3.6 3.6	289 407 401 388 442 410 429 567 593 278	3 7 3 3 3 1 1	11173 11004 12234 11883 10470 12500 13440 16500 7560	462 436 457 463 400 464 489 618 321	3 4 3 3 3 1 1	10435 10652 11558 10784 12085 17244 14606 8197	379 403 447 404 439 675 565 307
777) (7	7 2	'n	13621	3.5	467	1951 1952 1953 1954 1955 1956	2 2 2 1 1 1 2	12440 13870 13570 9810 16310 10760 15040	3.6 3.4 3.3 3.4 3.3 3.3	447 488 457 324 554 360 500	1 2 2 1 1 1	10550 12185 11740 9270 11550 9650 11615	394 455 426 324 451 353 443	1 1 1 2	7946 13658 9679 11412	348 508 336 409
77817	1 1	10	12109	3.6	433	1949 1950 1951 1952 1953 1954 1955 1956	1 2 1 1 1 1 1	10580 10865 13510 10200 11080 14200 12370 14070 13350	3.4 3.7 3.6 3.6 3.5 3.8 3.3 3.7	358 397 484 365 387 517 471 460 491	1 2 1 1 1 1 1	13190 11515 11290 11180 12920 11320 11920 12740 13470	427 438 415 423 496 415 463 479 515	 	11369 12208 11587 12524 12077	409 441 436 468 461
780230) 1	1	12810	3.4	432	1947	1	12810	3.4	43∠						
78,456	5	10	13265	3.3	441	1955 1956 1957 1958 1959	1 2 3 2 2	13580 9720 12197 14045 16080	3.5 3.3 3.2 3.2	475 325 397 448 517	2 2 2 2	10700 12515 12965 11975	402 486 485 477	1 2 1 2	7516 10177 12426 12067	399 388 457 470
782989) 1	2	15855	3.7	586	1949 1950	1 1	16310 15400	3.8 3.6	622 550						
784131	1	6	12958	3.7	473	1951 1952 1954 1955 1957 1958	1 1 1 1	10840 13600 11560 14780 12730 14240	4.1 3.5 3.7 3.6 3.5 3.5	450 480 423 528 450 504	1 1 1 1	12230 12240 11400 10820 12080 12740	436 436 403 386 436 446	1 1 1 1	11783 11783 10998 16747	408 408 401 375
788399		1	12540	3.1	387	1955	1	12540	3.1	387	1	10470	357	1	14148	500
790106	2	2	9195	3.8	350	1955 1956	- 1	9756 8640	3.9 3.7	323						
792315		1	16070	4.0	63/	1947	1	16070		637						
7923 18	3 31	105	10379	3.7	383	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5 12 17 14 12 12 12 1 6 4	10778 11008 10533 10444 9834 10625 10377 10830 11283 11700 10803	3.8 3.6 3.7 3.8 3.8 3.7 3.7 3.6 3.4 3.4	408 401 390 391 369 392 379 392 387 399 377	4 6 10 9 10 10 6 5 3	12308 10907 11279 10876 10661 10119 10948 11430 10837 10543	442 409 400 396 413 424 400 413	9 7 10 6 5 2	10125 9592 10188 10134 11390 11277 10987	377 366 379 386 430 415 451
79845	1	3	17690	3.5	617	1949 1953 1955	1 1 1	20140 19940 12990	3.0 3.3 3.0	117 664 469	1	12440 13060 11130	514 437 383	1	14148	500
799875	o 12	20	13876	3.5	492	1952 1954 1955 1956 1957 1958 1959	1 3 1 3 4 4	8280 13353 11993 12190 10460 15435 14915	3.3 3.6 3.5 3.2 3.5 3.5 3.7 3.4	273 483 416 391 363 535 544 340	1 1 1 3 4 4	7520 8470 9130 12510 13543 13115 12770	385 393 373 467 481 497 407	1 3 4 4	9516 12760 12573 11739	397 437 470 438
801375	5 20	53	11698	3.5	412	1950 1951 1952	4 8 12	10698 11536 11863		370 416 414	1 3 (15460 10727 116∠4	568 385 կկկ			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SCRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NU.	DAUGHTER., NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECURUS NO.		TEST PCT.		305-CAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAI
						1953 1954 1955 1956 1957 1958 1959		12064 11381	3.5 3.5 3.8 3.7	422 399 489 488 489 338 296	6 5 3	10968 11520	449 407 433 468	5 5 3 1	11163 11698 10425 10889 11401 13178 7783	435 387 409 446
81514	3 5	6	12028	3.9	462	1956 1957 1958 1959	1 1 2 2	8010 11490 12475 13760	3.3	308 382 451 565	1 2 2	12880 15025 10680	463 569 528	2	12110 13538 10813	424 507 519
815236	6 1	3	12813	3.4	440	1950 1952 1954	1 1	13730 12590 12126	3.0	486 458 393	1 1 1	10830 12020 10620	386 419 383			
5182 <i>5</i> 0	0 24	(0	13029	3.6	464	1949 1950 1951 1952 1953 1954 1955 1956 1957	5 4 8	12005 11570 11573 12955 13596 13128 13592 14696 13370 15940	3.7 3.7 3.5 3.5 3.6 3.5 3.6	403 423 427 455 466 466 481 524 476 634	4 6 12 14 12 4 2	11648 12175 12365 12700 12781 13215 14603 13825 14720	437 460 468 484 498	13 11	11822 11828 12954 14661 13254 15031	
62703	3 3	6	14007	4.0	55.5	1952 1953 1955 1957 1957	1 2 1 1	10710 13705 10210 17090 15300	3.9 3.6	380 527 371 568 637	1 1 1	15740 13100 11820 16140	644 488 435 648		10911 12851 15609	494
828522	2 2	3	11168	3.8	417	1952 1953 1954	1 1 1	14680 9850 10290	3.8 3.5 4.1	556 347 417	1	12760 11730	43 I 445	1	11565	405
829607	7 2	5	13377	3.8	508	1952 1953 1954 1955	1 2 1	12710 13995 15260 11580	3.8	446 524 643 462						
830269	9 2	14	10060	3.7	364	1953 1954 1955 1957) 1 1	10520 11870 9680 8170	3.4	398 407 347 300		13890 11290 9940 9740		1	10584 8960	376 313
831870	0 1	1	17980	3.5	633	1960	1	17980	3.5	033	1	11770	454	1	11990	463
83273 9	5 76	180	10749	3.7	394	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 6 17 14 31 35 27 15 15 9 6	10400 9918 10164 10283 10313 10893 11466 12197 12343 13029 12400 13360	3.5 3.6 3.7 3.7 3.6 3.7 3.7 3.7	364 350 367 367 378 396 417 450 460 487 460 502	21 26 20 12 11 8	10923 9770 12400 10502 10773 11102 11758 11731 11938 12310 11410	391 397 412 445 440 470	23 19 10 12 7	10738 10552 10749 10985 11350 11015 11854 12582	395
63422		1		4.6	450	1953	1	9750		450						
84 17 99	9 2	3	12640	3.9	487	1958 1959	2	11945 12710	3.6	470	2	9305	382 396	2	9396 9330	383 379
84245(0 10	31	10418	3.5	370	1949 1950 1951 1952 1953 1954 1955 1957	5 4 4 5 2 1	11444 10862 10288 10953 952d 10822 11010 10740 8300	3.7 3.5 3.7 3.6 3.0 3.7	409 407 365 404 341 387 392 340 263		11050 10650 11650 11830 10820 10645 10360 10400 10680	398 416 416 403 390 387	2 2 1 1	10197 10214 10955 10388 10126	386 412 383 377
84427(6 o 19	973	11241	3.8	426	1952 1953 1954 1955 1956 1957 1958 1959	3 41 104 166 172 151 166 152 13	11737 11034 10680 10833 11002 11302 12127 12135 12297	3.8 3.8 3.8 3.8 3.8 3.8	422 416 402 415 415 427 458 462 456	83 139 145 130 149 147	11405 11128 10875 11233 11395 11732 11819 11960 11222	409 430 428 450 453 457	30 79 127 141 133 135 144	11407. 10600 10804 10844 11615 11906 11919 12570	428 401 404 412 422 456 458 469
84642	5 2	3	11220	3.7	418	1954 1957	2	11245 15796	3.7 3.8	419 603	2	13105 13100	485 517	2	10769 12524	414 510
84685	6 I	1	12270	3.8	470	1959	1	12290	3.8	470	1	106∠0	392	1	10061	386
b4693	8 2	ц	10633	3.5	374	1950 1951 1952	1 2 1	9060 11470 10530	3.5							

TABLE 15.--DAOGHTLK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	OAUGHTEK	AVERAGE	BY SI	ΚE		R	ECORD AV	EKAGE (BY SIR	E BY	FRESHENING	YLAR				
SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAI LB.	FRESH YEAR	RECOROS ND.		TEST PCT.	FAT	305-DAY RECORDS NO.			YLARLY H RECORDS NO.		
							HULS	TEIN								
347579	1	2	9815	4.3	422	1953 1954	1	8290 11340	4.4 4.2	366 478	1	14210 11330	484 390			
85305L	1	2	12860	3.2	408	1949 1950	1	13800 11920	3.1 3.2	433 382						
858418	3 1	2	10340	3.6	364	1954 1955	1	11580 9100	3.6 3.5	414 314	1	11420 10760	408 363	1	14148	5 00
863756	1	1	13910	4.1	567	1960	1	13910	4 - 1	567	1	14690	533			
866635	36	91	11290	3.7	418	1953 1954 1955 1956 1957 1958 1959	11 17 15 11 11 14 11	10882 10552 11892 11697 12873 12558 12222 11980	3.6 3.7 3.7 3.7 3.8 3.7 3.7	393 393 444 437 488 469 453 431	10 14 13 9 13 11	11021 11934 10685 11554 12433 12436 11969 10880	412 443 399 461 481 472 469 409	9 12 13 9 9 13	11332 10755 10534 11133 11359 11666 11325	420 390 396 426 434 449 449
56741 2	9 391	756	11259	3.9	437	1949 1950 1751 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 20 27 48 60 80 98 95 90 124 93	10115 10668 10187 11306 11250 10401 11003 10826 11554 12018 12080 11404		355 402 395 426 427 396 428 420 446 478 471 453	7 15 27 53 76 87 82 77 102 91	10861 10228 11091 11295 10808 11211 11305 11904 12115 12167 11423	399 374 410 417 403 426 426 454 465 467 478	48 71 81 79 77 91 88 15	11074 10642 10569 10919 11167 11915 12028 11906	407 378 393 414 476 455 464
675201	2	8	12488	3.8	468	1952 1953 1954 1955 1956 1957	1 2- 1 2 1	11080 12350 12860 13825 12120 11490	3.7 3.5 4.0 3.7 3.6	430 456 456 538 452 414	1 2 1 2 1	11870 12210 11770 10520 9350 9330	416 448 411 371 332 349	2 1 1	10584 11685 8960	376 410 313
680188	s 50	107	11479	3.6	408	1953 1954 1955 1956 1957 1958	13 27 18 16 14 9	10649 10888 11651 12686 11756 12757	3.6 3.5 3.5 3.6 3.5 5.5 3.5	386 385 409 454 416 450 443	19 22 16 16 13 7	11110 10881 11818 11958 11592 12750 12362	431 414 454 458 446 496 473	9 22 13 14 13 6 8	10528 10832 11077 11120 11148 12319 12719	410 413 407 436 436 436 446
881984	1	1	9900	3.3	324	1957	1	9900	3.3	324	1	11130	394	1	7303	258
883725	1	3	10920	3.5	374	1952 1953 1954	1	11010 11360 10390	3.4	402 383 352	1 1 1	11050 10230 9190	403 364 326			
884838	86	219	10077	3.8	400	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	0 7 16 17 27 28 41 27 19	12147 12345 9270 9843 10590 10228 11104 11198 113031 12833 12298 11980	4.0 3.8 3.7 3.0 3.6 3.8 3.8 3.8	459 463 374 375 387 385 420 422 448 470 488 463 439	1 5 8 24 23 36 24 17 15	10560 13020 12473 10811 10989 11166 11679 12628 12150 12910 10100	339 47.3 43.9 40.2 40.9 42.4 44.3 47.0 46.∠ 49.1 39.6	22 21 31 24 17 12 9	10418 10478 10802 11153 11466 12437 11789 9592	335 358 404 426 435 473 440 386
88918	345	533	10415	4.0	433	1954 1955 1956 1957 1958 1959 1960	5 47 72 82 128 162 37	11330 10064 10538 10835 11453 11583	3.9 4.6 4.0 4.0	440 396 415 428 454 461 429	5 40 63 68 114 150 32	11768 11052 11653 11691 12277 12108 11361	418 443 458 473	5 37 60 66 108 154 31	9634 10609 10782 11432 12098 12206 11906	439
ö9 16 36	1	2	8770	3.8	327	1954 1955	1	8270 9270		329 325	1	11106 10 7 50	39 I 362	1	14142	500
893658	3 1	1	96,0	4.1	393	1955	1	9650	4 - 1	£45						
894513	o I	1	10350	3.6	371	1949	1	10356	3.6	371						
902500	3	5	13663	3.6	490	1955 1956 1957 1959	2 	12685 10780 9420 16600	3.2 3.2	455 347 299 619	/ 1 1	9655 3540 9740 14610	377 301 340 571	1 1 1 1	10584 11685 8960 9221	410 313
90z91) 1	2	13000	3.7	481	1958 1959	1	13960 12040		521 440	1	15620 14590	582 561			
¥13986	5 I	2	10620	3.2	321	1952	1	10140		336	i	10240				

TABLE 13.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY ERLED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

51 K., NO.	DAUGHTERS NO.	RELUKDS NO.		TEST PCT.		FRESH YEAR	KLCOROS NO.	MILK L8.		FAT	SUS-DAY RECURDS			YEARLY HI RECORDS NO.		FAT
						1953	HOLS	TEIN 9900	3.1	305	1	₹800	3 3 6	1	9952	344
914858	s I	2	11495	4.0	460	1957 1958	1	11430 11560	4.1 3.9	474	1	14440 10820	568 420	1	14268	538
92056	2 199	407	11367	3.8	435	1953 1954 1955 1956 1957 1958 1959 1960	0 46 80 91 74 53 47	12387 10539 10576 11317 11951 12368 13224 12443	3.6 3.9 3.8 3.8 3.8 3.8 3.8	473 408 409 436 452 469 502 459	43 70 85 66 47 47	10528 10823 11221 11486 12150 12193 12007 12071	415 413 429 430 435 470 461 476	4 40 00 74 64 44 47	9753 10569 10795 11168 11568 12190 12098 13490	310 402 403 421 441 468 463
92087	1 6	8	11248	5.9	443	1953 1954 1955 1958	1 2 4 1	11250 12555 11220 8690	3.7 3.8 4.0 3.7	412 473 449 320	1 1 2 1	11560 11440 12200 7870	450 465 449 310	1	12600 8 7 20	
92228	b 2	2	14445	3.4	487	1955 1958	1	12550 16340	3.3 3.4	418 555	1	9650 14410	39 s 55 6			
₹233 H	4 38	51	12378	3.8	471	1954 1955 1956 1957 1958 1959	6 6 5 13 5	13195 11148 12176 12685 12260 12774	3.7 3.0 3.7 3.9 3.7 3.8	491 420 449 487 463 468	4 2 4 12 3 10	9750 11300 12720 12706 11047 11974	422 445 483 501 440 481	2 6 2 16	8562 10272 11407 12110	352 407 441 497
42456	4 1	1	13250	3.5	463	1949	1	13250	3.5	465						
92610	1 2	5	9973	3.5	341	1952 1953 1954 1956	1 1 1	9610 11320 11130 10030	3.3 3.4	314 410 369 335	1 1 1	11030 12670 13570 11690	407 481 499 468	1	10268 11358	404 437
92837	в 1	1	9940	3.7	3 70	1959	1	9990	3.7	310	1	9600	363	1	10497	396
92906.	3 2	2	14855	3.5	521	1958 1959	1	14930 14780		538 503	1	12820 147⊋0	483 600	1	12982 17157	499 635
93126	7 3	5	13947	4.1	557	1956 1958 1959	1 2 2	10410 16095 15335	4.5 3.9 3.8	470 625 576	1	13560 14140	50 I 55 I	1 2	12382 13200	473 506
9367 la	6 2	14	10644	3.3	350	1949 1950 1954 1957	1 1	9780 10840 9820 11140	3.4 3.4 3.4 3.2	333 372 331 354	1 1 1	14340 11600 11460 11920	540 424 403 429	1	13058	4/9
94202	9 2	5	13657	3.7	494	1958 1959	3 2	13980 13490	3.8 3.5	527 472	2 2	12955 12620	504 496	2 2	12426 12497	500 493
94684	7 1	14	11368	4.1	464	1952 1953 1954 1955	i ! !	11810 11610 10710 11340	3.9 4.1 4.2 4.1	465 476 450 464	 	15500 11320 11740 11730	663 421 421 446	1	12600	481
94 30 91	4 1	2	10125	3.6	364	1954 1956	1	9680 10570	3.5 3.7	334 393	1	13610	491	1	11336 11412	419 413
95549.	3 2	2	11695	3.8	433	1960	2	11695	3.8	433	2	9950	389	1	10137	390
95946	6 1	1	11570	4.2	482	1955	1	11570	4.2	482	1	13820	524	1	10813	4∠3
96439	5 94	158	11124	3.6	400	1952 1953 1954 1955 1956 1957 1958 1959	6 12 10 19 25 18 25 33 10	11497 10073 9825 10265 9616 10404 11678 12739 13442	3.7 3.9	413 368 383 379 346 368 412 458 484		11525 10596 11535 11767 11090 11347 12151 12549 12416	422	7 8 13 16 14 21 29	11191 10857 10681 10682 10696 11948 12499	422 396 402 409 402 455 451 489
96621	8 2	5	11911	4.6	546	1957 1958 1959 1960	1 2 1	11810 11335 13320 11720	4.5 4.6 4.4 4.5	537 528 591 526	1 1 1	13520 8910 12150 10040	516 481 442 477	1 1 1	8742 11305 10846	423 483 521
96966	7 1	1	12220	3.8	460	1959	1	12220	3.8	460	1	12300	510	1	11543	437
96966	9 1	1	12660	4.1	525	1959	1	12660	4.1	525	1	11/20	443	1	12284	477
97641	2 192	28 6	11811	3.9	458	1955 1956 1957 1958 1959 1960	7 30 40 89 107 13	10526 10858 10957 12119 12414 11202	3.9 3.8 3.9	407 420 419 473 483 430		11644 12030 12343 11987 11966 11481	470 455 469 462 463 463	5 24 33 76 103 12	10931 11500 11401 11843 12000 11601	411 410 436 453 466 452
98786	9 6	6	13600	3.8	510	1957	1	11700	4.0	410	1	15450	541	1	14263	5 38

45

1040368

1041559

1045647

1

114

3 13213 3.9 515

202 11636 3.9 453

7060 4.1 289

1959

1959

3 13213 3.9 515

7080 4.1 289

3.7 375 4.0 406 3.8 426 3.9 450 3.8 439

1

3 13363 528

1 12470 470

5 11834 437 11 10937 399 9 11538 429 25 11464 428 30 12217 456

3 9668 3/5

1 13843 517

10037 365 10999 411 11010 405 11278 428

	DAUGHTER	AVERAGE	BY 511	RE		R	ECORO AV	ERAGE E	SY SIR	£ 8Y	FRESHENING	YEAR				
SIAE NO.	DAUGHTERS ND.	RECORDS ND.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY RECORDS NO.		FAT	YEAKLY H RECORDS ND.		FAT LB.
						1958 1959	H0LS 2 3	TEIN 13340 14407	3.6 3.8	480 543	1 3	11860 10577	401 490	1 3	10802 11155	386 511
988462	1	1	13250	4.0	533	1955	1	13250	4.0	533	1	9650	393			
989939	1	1	B 590	4.2	360	1959	1	8590	4.2	360	1	13080	516	1	14421	546
990221	1	2	15235	3.7	567	1958 1959	1	16000 14470	3.7 3.7	599 534	1	11550 10110	446 543	1 1	10148 10791	434 445
996252	2 3	5	15543	3.9	602	1956 1957 1959	2 2 1	15435 16635 14560	3.9 3.7 4.1	594 613 599	2 1 1	13080 14100 14820	526 501 572	1	14268 9221	538 360
997481	2	2	11875	3.9	457	1959 1960	1	9560 14190	3.9 3.8	371 542	1	11920 14820	454 60 I	1	12284 15413	497 639
999938	3 1	1	15150	3.5	530	1960	1	15150	3.5	530	1	14540	537			
1001502	. 2	2	12500	4.0	504	1959 1960	1	9850 15150	3.8 4.2	375 632	1	12420 13470	46B 509	1	13113 12895	487 494
100 1748	1	2	10685	4.3	456	1958 1959	1	11040 10330	4.1	458 454	1 1	12570 10500	481 416	1	11074	417
10 0 76B0) i	1	10940	3.8	417	1959	1	10940	3.8	417	1	11050	438	1	11936	470
1008565	1	Ц	12238	3.2	394	1955 1956 1958 1959	1 1 1	11540 12200 12920 12290	3.4 3.2 3.2 3.1	392 388 412 383	 	11210 12420 12330 13740	407 427 423 476	1	12426 12328	457 448
1011780	114	126	12634	3.9	489	1958 1959 1960	6 98 22	12665 12762 11559	3.9 3.9 3.9	492 496 441	6 96 21	12838 12190 10814	490 480 417	6 89 19	1278 <i>2</i> 12305 12114	407 475 466
1023347	1	1	14960	3.1	462	1959	1	14960	3.1	462	1	14030	487	1	13276	467
1023967	1	1	13320	4.2	554	1956	1	13320	4.2	554	1	9720	388	1	10726	436
1025792	! 147	257	11431	3.8	433	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 11 26 25 36 34 24 47 43	10100 10090 11184 9861 10692 10964 11468 11733 13129	3.9 3.6 3.7 3.6 3.8 3.7 3.8 3.8	388 386 410 306 410 415 428 445 501 453	6 21 20 33 28 21 40 43 7	11357 10947 11293 11215 11415 12159 11862 11977 11557	412 403 417 430 446 470 461 468 439	19 18 27 26 21 38 41	11110 11081 11027 11039 11503 11776 11900 11755	415 406 411 427 442 449 456 449
1026115	5 1	1	13380	3.8	510	1959	1	13380	3.8	510	1	12720	494	1	12764	4.27
1028928	3 1	1	17310	4.2	726	1959	1	17310	4.2	726	1	14580	575	1	9221	360
1029279	1	1	9B20	3.3	321	1959	1	9820	3.3	321	1	11340	459	1	11805	48.
1030404) I	1	13400	3.8	512	1959	1	13400	3.8	512	1	11670	444	1	12284	497
1032819	33	34	11734	3.8	447	1959 1960	29 5	11729 11894	3.8 4.0	444 467	28 2	12057 11492	472 447	28 4	11845 10451	460 416
1034472	2 133	208	11605	3.9	449	1952 1953 1954 1955 1956 1957 1958 1959	1 8 15 16 16 18 43 71 20	14410 11450 11147 10714 10209 11074 12288 12033 11032	3.8 4.0 3.9 3.9	550 472 422 428 403 432 474 470 424	6 14 15 15 16 40 71	12132 11095 11135 10661 11738 12053 11948 11725	456 417 418 422 454 467 465	6 13 16 14 16 37 69	10591 11225 11109 11078 10604 11834 12055 11780	414 426 419 438 412 456 472 462
1036118	3 24	25	12003	4.1	490	1958 1959 1960	2 22 1	11760 12099 11470	3.8 4.1 4.3	444 499 493	22 1	14305 12628 11770	540 486 477	1 20 1	14486 12862 13614	540 492 549
103859	197	317	12055	3.9	466	1952 1953 1954 1955 1956 1957 1958 1959 1960	3 8 18 38 28 35 69 94 24	11747 12269 11315 11316 12216 13145 12122 12351 11981	4.0 4.0 3.9 3.9 3.9 3.9 3.9	474 483 434 432 479 506 472 481 458	1 7 17 34 26 29 53 91 23	12200 13143 11388 10960 12034 12397 11991 12091 11702	428 507 436 416 461 465 464 474 456	6 16 28 23 30 46 88	11841 11121 11123 11632 11578 12100 11809 12237	472 425 418 444 446 405

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BRELDING URGANIZATIONS--GROUPED BY EREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL NO.	DAUGHTERS NO.	RECOROS 10.		TEST PCT.	FAT LB.	FRESH YEAR	RECORUS		TEST PCT.	FAT LB.	305-DAY RECORDS NO.			YLAKLY HI RECORDS NO.		
						1957 1958 1959 1960	HOLS 32 43 30 5	TE IN 12457 12112 11847 14774	3.9 4.0 4.0 3.9	482 479 406 579	21 36 30 4	12272 11838 12256 12925	478 455 464 517	27 35 30 4	11744 11894 12116 12584	451 459 462 487
104867	8 1	1	13470	3.9	524	1960	1	13470	3.9	524	1	13060	50 o			
105685	2 3	3	11733	3.9	465	1958 1959	1 2	9960 12620	3.4 4.2	341 527	1 2	11610 14025	486 559	1 2	8829 14721	34.₹ 60.∪
108127	U I	2	14215	4.2	592	1958 1959	1	14790 13640	4 • ∠ 4 • i	621 562	1 1	12260 11650	423 441	1	11761 12284	414 497
108166	4 1	1	10430	4.6	478	1958	1	10430	4.0	478						
108546	2 84	96	1222b	3.8	459	1958 1959 1960	21 63 12	13126 12180 11752	3.8 3.8	481 463 449	19 60 10	12540 12436 11358	493 480 448	17 58 9	12823 12710 11601	489 491 462
108797	4 1	1	180D0	3.9	710	1960	1	18000	3.9	710	1	14636	5∠6			
109430	5 I	1	11580	4.3	499	1959	1	11580	4.3	499	1	10400	415	1	10311	409
110743	6 1	1	7610	4.1	312	1959	1	7610	4.1	312	1	11130	433	1	10813	413
114958	4 1	1	10940	4.3	465	1956	1	10940	4.3	465	1	12660	489	1	11728	471
115374	0 2	2	9500	3.7	35∠	1959	2	9500	3.7	352	2	12100	462	2	12284	497
115856	9 00	77	11370	4.0	453	1957 1958 1959 1960	23 37 10	11113 11095 11658 10431	4.1 4.0 4.0 4.1	448 439 467 418	6 20 36 10	13033 11365 11027 10100	494 437 427 405	6 16 35 7	12065 11431 11085 10863	468 440 430 433
117546	6 1	1	12770	3.4	431	1959	1	12770	3.4	431						
117957	4 2	3	12078	4.0	482	1958 1959	1 2	10050 12205		407 481	1 2	15660 13500	547 520	1 2	14344 14 5 95	554 564
118101	4 ъ	9	12789	5.9	50೮	1959 1960	5 4	10360 15155	3.8 4.1	400 615	24 14	11080 12840	442 521	5 4	10741 13211	435 513
118366	5 1	1	13520	3.5	475	1959	1	13520	3.5	475	1	13860	502	1	14508	540
119278	4 1	1	15110	3.8	571	1959	1	15110	3.8	5/1	1	13520	511	1	14421	546
120735	4 20	26	12282	3.8	469	1957 1958 1959 1960	1 12 10 3	20250 12461 12129 9600	3.4	817 475 456 568	1 9 10 2	12620 11979 12376 11635	494 419 467 446	1 9 10 2	8884 10961 12649 10066	337 435 461 383
121690	9 1	1	8350	4.4	367	1959	1	8350	4.4	307	1	8960	345	1	7717	275
122416	2 41	0د	11834	4.0	469	1958 1959 1960	10 35 5	11474 11973 11684	4.0	454 473 463	9 35 5	11192 12103 13068	437 467 552	9 34 5	11298 1222? 12454	457 468 500
123245	3 28	30	12376	3.8	470	1958 1959 1960	4 ≥1 5	12265 12054 12776	3.8	471 453 497	4 2 I 5	12738 12321 12032	479 474 496	21 3	12508 12268 12557	463 466 503
126997	0 4	4	12898	4.1	534	1959 1960	2	14185 11610		628 451	2	14910 10140	568 392	2 2	15113 9592	589 3r6

47

434089

3

11 9514 4.9 463 1951

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

					RDS FR		STATE ONL		W 210	5 OV	en (Nenthe	WC A 3				
	OAUGHTER	AVERAGE	BY SI	R E		К	ECURO AVE	RAGE	34 218	F 84	FRESHENING		. AV.	YEARLY HI	ERN AVE	R A(s)
51RE NO.	0AUGHTERS NO.	RECOROS NO.		FEST PCT.	FAT L8.	FRESH YEAR	NO.	L8.	TEST PCT.	FAT LB.	RECORDS NO.			RECOROS NO.	MILK L8.	
37751	7 1	2	6100	5.5	335	1953	JERS 2	6100	5.5	335	1	9060	405	1	7140	380
38 30 5		28	8068	4.9	387	1948 1949 1950 1951 1952 1953 1954 1955	1 5 4 5 4 3 3 1 2	8630 9130 7798 7590 8610 7580 6987 9090 8685	4.1 4.7 4.8 5.1 4.6 4.5 4.5	350 428 372 385 394 340 314 418 388	1 2 3 3 3 3 3 1	6450 5795 7150 6957 8047 7283 6890 6380 8610	366 283 347 356 382 374 351 358 451	2 3 1 2	6900 7074 8382 7489	352 358 444 386
38341	2 6	15	7905	5.3	415	1947 1948 1949 1951 1953 1954	1 5 3 1 3 1	6610 7102 8377 11500 8053 7820 6880	5.3 4.6 5.4 5.5 5.5	352 374 380 621 434 432 324	1 2 1 1	8930 9005 9690 8350 5230	452 456 466 481 275	1	82 19 7096	420 362
40332	0 35	89	7897	5.3	416	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 4 7 12 17 14 14 7 7 4 2	9510 10088 7293 8274 8666 7544 8001 7326 7763 8183 8800	5.7 5.0 5.3 5.3 5.2 5.4 5.3 5.3 5.3 5.3	546 499 389 435 460 398 417 381 413 422 498	2 3 8 9 10 5 5 3	7060 7267 7354 7339 7769 7356 7866 8390 8890	334 381 376 387 399 391 437 463 492	6 9 10 5 5 3 1	7625 7580 7893 7670 8086 8538 9167	398 390 403 408 427 469 518
40514	8 4	15	7681	5.3	402	1948 1949 1950 1951 1952 1953 1954 1955	1 1 3 3 1 2 2 2 1	9440 7960 6733 8303 8450 8060 7705 8050 8710	5.0 4.8 5.4 5.1 5.1 4.9 5.0 6.0 4.9	475 384 359 425 430 389 388 480 427	1 1 1 1 1	8780 7870 7940 7540 8220 8820	498 393 388 352 416 456	1 1 1	8393 7674 8022 7968	414 380 401 412
40686	7 17	61	7864	5.2	403	1950 1951 1952 1953 1954 1955 1956 1957 1959 1960	2 6 12 11 12 7 6 1 2 2	6875 8255 7888 8295 7757 7873 8018 10990 9615 8615	4.9 5.0 5.3 5.2 5.3 5.0 5.1 5.1 5.3	327 407 416 427 406 392 410 560 509 459	3 5 5 5 3 3 1	8147 8586 7908 7702 8090 8403 10040	423 435 415 403 438 434 562	5 5 3 3 1	7839 7948 8066 7779 8731 8546	409 415 430 415 486 441
40 79 7	1 41	115	7175	5.4	38ർ	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 5 10 21 23 20 15 12 6	6270 8108 6918 7281 7138 7460 7877 7584 8452 7010	6.6 5.5 5.4 5.4 5.5 5.2 5.6 5.5 5.5	413 438 378 390 383 412 408 427 459 383 531	1 2 5 11 13 9 7 4	9560 8065 8080 7721 7922 7623 7513 9503	519 439 419 409 422 404 403 523	9 13 9 6 4	7973 7788 7928 7481 8600	420 419 412 406 466
41157	71 8	20	7996	5 . 3	421	1950 1951 1952 1953 1954 1955	3 3 3 2 1	8570 7675 8287 7810 6870 9190 8583	5.1 5.5 5.3 5.5 5.7	454 394 456 422 378 527 463	1 1 1 1 1	9730 8630 8850 8870 9580	516 476 469 510 547	1 1 1 2	8687 8633 9036 8927	481 477 512 484
41484	1	1	6890	5.3	362	1957	1	6890	5.3	362						
41548	17	2	6505	4.8	312	1951 1952	1	6680 6330	4.6 5.0	310 314						
43119	28 32	93	8246	5.0	412	1950 1951 1952 1953 1954 1955 1956 1957 1956 1959 1960	4 12 18 15 15 12 7 3 4 2	7763 8043 7866 0253 8341 8370 8666 9460 9855 12250 11300	5.0 5.0 4.9 4.7 4.9 4.8 4.8	361 399 394 406 393 408 407 454 481 733 679	4 5 6 4 5 2	8265 7266 7008 7300 7692 7045 9397 9290 10660	432 346 357 375 398 352 496 519 619	6 5 4 2 1 3	7363 7460 7110 6900 7848 9185 9167	367 374 359 361 403 489 518

2 9940 5.1 501

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	KECDRDS NO.	MILK LB.			FRESH YEAR	RECORDS		TEST PCT.	FAT L6.	305-DAY 0 RECDRUS		FAT	YEARLY HE RECORDS NO.		FAT
						1952 1953 1954 1955 1956 1958	JLR: 2 1 2 2 1 1	9305 8360 7815 8600 9900 10530	4.9 5.4 5.0 4.8 5.1 4.3	448 452 388 409 503 507						
43771	1 50	123	7637	5.1	391	1948 1949 1950 1951 1952 1953 1954 1955 1956 1956 1958 1959	1 8 7 11 15 18 20 17 14 3 8	5570 7785 8003 7333 6985 7484 7174 7265 8401 8377 8778 8490	5.5 5.4 5.1 5.0 5.1 5.0 5.1 5.1 5.3 5.1	307 420 406 370 353 376 359 372 425 441 449	2 3 5 8 9 7 7 5 1 3	6910 7533 7634 7570 7530 7638 7870 7892 12690 9770 9000	351 365 383 384 388 379 406 662 508 451	8 9 7 4 1	7042 7656 7935 6971 8796 9554 8960	304 390 379 372 456 497 458
43935	6 I	ц	7255	5.8	413	1952 1953 1954	1 1 1	6890 2920 8930	5.6 6.0 6.0	387 175 533	1	6360 8840	364 434			
44110	7 17	46	7321	5.3	386	1955	1	10280 7490	5.6	556 420	1	9050	297	1	6126	304
						1952 1953 1954 1955 1956 1957	6 10 7 6 8	6912 7088 7659 7737 7522 7695	5.4 5.4 5.3 5.5 5.2	373 384 415 409 408 401	3 6 3 4	7320 7293 3040 8038 8163 9068	374 366 410 409 418 455	6 3 3 3 4	7485 8324 7310 7732 7693	372 407 369 39h 3d6
44249	ц В	15	6752	5.6	375	1953 1954 1955 1956 1957	4 3 3 4 1	6860 7580 6647 7125 7590	5.4 5.4	388 419 364 384 450	1 1 2	8140 7430 7630	392 369 399	1 1 1	8894 8720 8099	421 428 410
44439	8 11	23	7842	5.5	429	1954 1955 1956 1957 1958	7 6 3 3 3	7599 7467 8447 8890 8987	5.6	424 429 448 493 424	2 2 1	8390 7590 9710 8235	420 383 491 432	2 2 1 2	8894 8720 8099 9287	421 423 410 472
4475 4	l+ j.≯	41	7870	5.2	400	1959 1953 1954 1955 1956 1957 1958	5 11 11 7 4	7740 9112 7513 8235 8459 6933 7337	5.2 5.3 5.2 5.5	437 470 389 417 455 376 406	1 5 7 3 3	9470 10030 7350 7807 7197 7593 8413	542 513 389 404 399 404 456	1 5 7 3 3	9886 8217 7556 7291 8164 8084 8459	560 451 597 374 442 435 450
44895	1 3	В	7457	5.1	382	1948 1949 1950 1951 1952 1953	1 1 1 2 2	8860 7760 9340 7585 6525 6900	4.6 5.5 5.4 5.7	477 358 513 408 372 369						
45 i 15	. Lą . Lą	9	8366	5.7	478	1955 1956 1957 1958 1959	2 3 2 1	6865 7840 7770 10710 9810	5.7 5.7 5.9	384 443 443 634 569	1	7340 6910	390 401			361 362
45567	6 45	57	7830	5.6	440	1954 1955 1956 1957 1958 1959	3 13 10 9 11 6	8197 7108 7993 8347 8452 8237 8136	5.2 5.5 5.7 5.8 6.0	425 369 435 471 488 495 443	3 5 4 3	6813 8100 7900 8823 9623 7860	346 407 418 466 519 380	7 3 5 5 4 2	7387 8226 7660 8579 9309 9478	422 400
46187	76 7	23	7213	5.3	378	1949 1950 1951 1952 1953 1954 1955 1956 1957	1 4 3 4 2 3 2 2 1	7560 6568 6180 6798 6715 4913 5845 7165 7670 9540	5.4 5.6 5.6 5.6 5.6 5.6	366 371 269 335 394 388	2 2 3 2 2 1 1 2	5640 6180 6710 6975 6090 6080 7055 7530	278 299 342 332 298 297 362 368	2 2 1 2	7183 7085 6017 6387 7750	303 338
46596		1	6980	5.8	403	1952	1	6980								
46590	oB 4	10	7645	5.9	45∠	1952 1953 1954 1955 1956	1 2 3 1	6920 7105 7517 11700 9570	6.1 6.1 5.8	437 457 676	2 2 1 1	10010 9415 8810 8860	568 530 485 497	2 2 1	8764 9777 9221 9156	514

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVENAGE BY SIRL

STRE	DAUGHTERS	RECOROS	MILK	TLST	FΑΓ	FRESH	RECURDS	MILK	TEST	FAI	305-DAY (RECORUS			YEARLY H		
NU.	NO.	110.	LU.	PCT.	L8•	YEAR	NO.	SEY	PCT.	LB.	NO.	Lt.	LB.	NO.	LB.	FR.
						1957 1958		10330 9750	5.7 5.7	589 559	1	11180	621	1	9298	525
46763	0 1	5	7844	4.8	371	1953 -1954 1955	1	6520 8120 7270	4.8 4.8 4.8	311 388 349	1 1 1	7650 8470 7570	351 428 387	1 1 1	7935 8894 8720	373 421 428
						1956 1957	į	8200 9110	4.8	396 443	i	9740 12680	494 664	1	8099 8 / 96	410 456
47339	9 16	17	7 808	5.0	388	1955 1956 1958	9 4 3	6946 7530 9450	4.8 5.0 5.1	332 378 485	6 2 1	7525 7865 9830	378 412 477	6 2 1	7220 7827 7717	345 391 398
			0007			1959	1	10160	5 · I	516	•	7030	4	•		3,0
47852	3 27	45	8293	5.1	42∠	1956 1957 1958 1959 1960	2 1 24 16 . 2	8370 7890 7926 8752 8205	4.6 4.8 5.2 5.2 4.5	362 382 413 457 369	9 12 1	8771 8661 8210	47/ 4/3 438	9 12	5874 8816	469 485
48064	2 73	149	8843	5.2	455	1951 1952	4 12	10225 9563	5.0	506 480	3	9880	49z		77.00	
						1953 1954 1955	15 12 9	9321 8516 8820	5.1 5.0 4.9	4/3 422 432	8 / 8	8785 8436 8054	426 440 419	4 5 6	7788 7861 7416	408 375 366
						1956 1957 1958	8 15 40	8529 8785 9098	5 · 1 5 · 1 5 · 1	432 439 461	5 7 17	8306 9030 8896	445 480 474	3 5 18	7020 7881 8726	3/6 417 4/1
						1959 1960	25 9	9089 10363	5.1 5.3	469 536	12	9053 10923	484 555	17 4	9234 10126	474 510
48826	7 3	8	в300	4.9	409	1953 1954 1955	1 2 2	8410 8235 8815	5.3 4.8 5.4	446 401 472	1	7590	397	1	8 7 20	428
						1958 1959	2	7500 10840	5.1 5.0	386 538	1	9320 9390	519 540	1	10213 9886	54 I 560
49545	3 19	28	7792	5.3	409	1955 1956 1957	1 7 9	4450 7941 7337	5.6 5.3 5.2	25 I 422 384	3 2	11067 8215	584 44 I	3 2	7685 7167	411 330
						1958 1959	8	7573 7843	5.4	400 386	4	7798 7710	384 383	5 2	8648 7303	430
49574	3 3	6	9452	5.5	511	1958 1959 1960	3 2 1	10253 8130 6880	5.4 5.7 6.0	547 462 410				2 2 1	11794 11854 11783	492 40 7 400
49598	7 3	12	10401	4.8	496	1953 1954 1955	2 3 2	9520 10167 11820	4.5 4.7 4.9	425 479 565	1 2 2	10940 11100 10950	536 549 533			
						1956 1957 1958	2 2 1	10250 12210 15190	5.2 5.1 4.2	523 599 644	2 2 1	10525 12020 11750	562 573 579			
49598	9 3	9	8234	5.4	447	1952 1953	2 2	8195 8725	5.1	417 481						
						1954 1955 1957	2 1 1	7775 8300 7780	5.6 6.0 5.5	432 495 430						
49751	6 I	2	9310	4.9	453	1958 1958	1	8120 9710	5.5 4.9	449				1	10072	506
50211		1	6770	5.4	366	1959 1959	1	8910 6770	4.8 5.4	432 366	ı	7710	377	1	11827 7303	48 I 360
50985		58	8016		416	1952 1953	1	8960 8058	5.2	470 426	1	9880 8225	519	2	8219	451
						1954 1955	14 11	8084 82 1 0	5.2 5.3	417 429	2 3 1	7550 6920	412 390	.3 1	7547 8251	415 439
						1956 1957 1958	9 2 8	7739 8140 8151	5.1	396 447 418	3 2	7137 9110 8088	391 463 417	2 2 4	8203 8055 8789	447 436 439
						1959	7	9249	5.2 4.9	44/	5	8088	415	6	8300	418
51032		2			506	1959 1960	- 1	9620 10930	5.0 4.9	481 530	1	9590 9590	534 534	ı	4886	560
51047		6	9432	5•1	485	1957 1958 1959	4 1 1	9638 10580 8870	5.3 5.7 4.4	511 604 390	2 1 1	11305 9550 7110	606 510 357	2 1 1	8764 10213 7303	471 541 360
51293		2	7460		426	1957	2	7460	5.7	426	2	7935	398	2	7134	301
51498		14	8707	5.3	458	1958 1959	10	9445 8266	5.4	501 435	7	7520 8246	380 446	7	7619 6760	373 467
51708	30 3	3	5693	5.2	293	1958 1959	2	6305 4470	5.1 5.3	323 235	1	5/90	302	1	6813	356
51708	2	4	7928	5.6	438	1957 1958	ا خ	7190 8173	5.6 5.5	405 449	1 2	88 7 0 8350	459 453	1 2	8153 9287	424 498
52249	99 11	11	9148	5.4	487	1959	10	9268	5.3	487	8	8503	445	9	ช577	446

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

RECORD AVERAGE BY SIRE BY FRESHENING YEAR DAUGHTER AVERAGE BY SIRC

SIRE NU.	DAUGHTERS NO.	RLCOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KLCUKUS NU.		TEST PCT.	FAT	305-DAY (RECUROS NO.		. AV. FAI L8.	YEARLY HE RECORUS NO.	MILK	RASE EAT Lb.
						1960	JEK:		6.2	493				1	8426	440
524368	8	10	6558	5.6	367	1954 1955 1956 1957	2 3 1 3	5930 7190 5560 5270	5.6 5.3 5.9 5.7	330 388 331 303	1 2	8820 6725	506 340	2 2	7892 7385	422 374
						1958	1	8240	5.0	465	t	7750	433	1	8083	437
524078	1	1	11160	5.0	554	1959	1	11160	5.0	554	1	9190	457	1	c164	411
534119	2	2	7310	5.3	386	1958 1959	1	7250 7370	5.3 5.2	386 386	1	7330	36 B	1	177 2	367
534366	I	3	7583	5.4	408	1957 1958 1959) 	6230 9090 7430	5.4 5.4 5.4	334 489 402	1	8530 9210 8570	438 471 437	1	8153 8894 8618	424 457 450
536826	3	10	11468	4.9	557	1958 1959	6 4	12750 8840	4.9 5.0	630 439	2 2	11930 11575	586 575	2	11952	593
540127	6	11	7182	5.3	381	1958 1959	4 7	6135 7687	5.4 5.3	319 413	1 3	10170 0353	473 446	1 5	8557 8531	453 461
546648	3	3	4987	5.4	269	1958 1959	1 2	5640 4660	6.1 5.6	346 231	1 2	7700 5900	404 310	1 2	9505 6813	499 356
552352	14	21	8027	4.9	395	1958 1959 1960	6 10 2	7035 8326 8736	5.1	347 420 428	3 6 5	8493 9303 8014	462 458 405	2 8 5	7609 9339 8227	402 464 432
557267	ì	1	7690	4.8	372	1959	1	7690	4.8	372	1	8850	44/	1	8818	450
557268	2	2	7360	5.6	407	1958	2	7360	5.6	407	1	8550	440	1	8594	457
00دة 55	1	1	7140	5.5	394	1960	1	/146	5.5	394	1	3870	446	1	9156	464
565429	1	1	5330	5.0	264	1959	1	5330	5.0	264	1	6870	369	1	7586	395
572375	1	1	3760	5.3	198	1960	1	3760	5.3	198						
572789	4	Łį.	7115	5.6	395	1959 1960	3 1	7673 5440	5.4 5.4	419 321	1	4930	196	1	8208	453

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIKE BY FRESHENING YEAR SIRL DAUGHTERS RECORDS MILK TUST FAT FRESH RECORDS MILK TEST FAT RECORDS MILK FAT RECORDS MILK FAT RECORDS MILK FAT NO. NO. NO. LB. PCT. LB. YEAR NO. LB. PCT. LB. NO. LB. LB.

							BROWN	SW1SS							
39593	1	1	10800	4.1	446	1958	1	10800	4.1	446	13710	610	1	9810	425
454 17	5	8	8106	4.1	330	1953	2	9280	3.9	364	11700	464	1	10671	405
						1955	2	7685	4.2	323	11780	466	1	10148	408
						1956	3	7403	4.2	312	9340	395	1	9080	3/3
						1957	1	8870	4.0	352	9080	343			
57994	1	1	8140	3.8	310	1951	1	8140	3.8	310					
64505	2	6	9798	4.3	422	1952	1	13470	4.6	622					
						1953	1	9250	3.9	365					
						1954	1 2	8060	3.9	315 381					
						1955 1957	í	8900 6900	4.3	280					
65421	3	9	9553	4.1	389	1953	1	9070	3.8	345					
	-					1954	i	9670	3.6	370	7550	304	1	1957	324
						1955	2	11130	4.0	449					
						1956	2	10030	4.8	470			!	7706	315
						1957	1	6990	4.0	281	l 6130 l 7900		1	7467 7815	304 315
						1958 1959	i	8200 9800	3.9 3.9	316 384	1 7 9 0 0	314	1	10649	422
68354	5	7	7907	4.1	319	1955		8846	3. /	348	1 10070	406	1	10148	408
00334	,	'	1701	4.1	317	1956	4	7883	4.2	325	1 10400		i	9080	373
						1957	2	8805	4.0	353	10215	419	2	11064	459
70747	5	15	8654	3.9	340	1955	2	9695	4.0	388	8810	363	2	8606	350
						1956	3	7727	3.9	305	7630	310	2	8393	344
						1957	1	8580	4.1	348	1 10580		1	11064	457
						1958	ა 1	9883	3.9	385	2 8385 I 8690		2	84 7 5 9745	337 370
						1959	'	10820	3.5	381	0070	338	'	9143	310
74062	2	3	8758	4.1	353	1955 1956	1	9620	3.9	379					
						1957	- 1	8810 8360	4.1	352 339	7330	301	1	7467	304
7					0.7						3/00	410	,	21.72	201
762 02	1	1	6350	4 - 4	278	1957	1	6350	4.4	278	7620	310	1	7467	304
87677	3	7	10309	4-6	471	1958 1959	5 2	9504 10250	4.6	441 422			2	12404	48 F
							2								
89612	5	14	10537	4.1	435	1953	!	13910	3.8	531	10720		1	10671	405
						1954 1955	1	8330 11005	3.6 4.1	303 453	72 7 0 2 8905		1	10148	408
						1956	2	9580	4.3	414	2 8905 1 9340			10140	400
						1957	3	10663	4.1	439	10390		1	11064	459
						1958	1	9280	4.5	414	9250		- 1	9134	358
						1959	3	8973	4.2	373	9065		3	9232	355
						1960	2	9115	4.3	391	1 10160	390	2	10595	417
90000	1	1	5880	3.7	218	1956	1	5880	3.7	218					
93771	3	3	9163	4.1	37∠	1957	3	9163	4 - 1	372	3 9183	382	3	9865	407
94392	1	2	9470	4.2	397	1956	1	9/10	4.3	419	10470		1	9080	373
						1958	1	9230	4.0	574	1 10160	417			
94665	1	1	4810	3.7	179	1956	1	4810	3.7	179					
100544	1	2	11000	3.9	433	1955	1	10510	3.8	404	9900		1	10148	
						1956	1	11496	4.0	462	10240	433	1	9080	373
108905	2	2	11570	3.9	456	1958	1	11146	3.8	427	10380				
						1960	1	12000	4.0	484	9250	354	1	10126	302
113594	6	6	8850	4.1	364	1957	c	8212	4.2	347	8456		5	8906	366
						1959	ł	12040	3.7	448	1 10360	392	- 1	9865	375
124609	1	1	13970	3.7	523	1960	1	13990	3.7	523			1	12415	403

1 7970 3.6 286

2486947

- 1

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

1959

DAUGHTER AVERAGE BY SIRE RECURD AVERAGE BY SIRE BY FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERO AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LE. LB. NO. LB. Lb. SIRE OAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. M. SHORTHORN 2 5 8089 4.1 342 1956 1957 7980 4.0 318 8010 4.7 364 62469 1 1/100 617 1 10606 397 1958 7415 3.4 259 10160 392 10210 346 9950 392 1957 70154 3 5 7288 3.6 264 15610 3.8 593 10606 397 1958 1959 9630 3.6 4920 3.6 350 10638 359 389 9461 14 08 22 7260 3.7 266 1960 7260 3.7 266 9167 344 2011863 1 8060 3.7 296 1957 1 8060 3.7 296 I 17820 698 1 10606 397

1 7970 3.6 266

1 9100 354

1 8775 329

53

TABLE 15.--DAUGHTER-AVERAGE OF TRES IN SERVICE IN ARTIFICIAL BRECDING OR ANIZATIONS--GROUPED BY DREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

		AVERAGE				, i	EGOND AV	LINAUL			I KESHENING T					
51KL	DAUGHTERS NO.	KECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	FRESH YEAR	RECURDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CO RECURDS NO.	NTLMP MILK Lb.	FAI LB.	YLARLY F RECORDS NO.	JERD AV MILK LB.	LKASE FAT L3.
							AYRS	HIRE								
41058	3	В	8087	4.4	357	1947 1949	7	7643 9060		353 364						
46463	3	5	6614	4.4	293	1947	5	/190	4.4	318						
46502	9	35	8385	4.3	359	1947 1948 1949 1950 1951 1952 1953 1954	1 2 6 6 6 5 4 2 3	5600 11085 8777 7378 9127 8912 9753 6920 9813	4.3 4.3 4.3	472 395 320 392 382						
46522	-	ls	9981	4.2	413	1947 1948 1950 1951 1952 1953 1954 1955	5 1 3 3 1 1 2	8530 12400 12437 10320 12040 9880 11835 13450 7270	4.1 4.0 3.4 4.0 4.0	544 510 413 411 399						
48062	1	5	6494	4.3	280	1948 1949 1950 1952	2 1 1 1	5610	4.0 4.3 4.1 4.0	241						
504/0	2	3	60/8	4.1	253	1948 1949	2 1		4.2 4.0	255 305						
52394	1	1	6200	3.8	239	1950	1	6260	3 . 0	239						
53433	4	25	11244	4.1	456	1948 1949 1950 1951 1952 1953 1954 1955 1956	2 3 4 3 3 3 3 2 1	9095 12430 10073 10467 10760 10483 11500 12750 12520 14310	4.1 4.2 4.2 4.2 4.1 4.1	506	1 1 1 1	2220 9600 1310 1370 6620 4400	374 440 460			
53909	2	2	7335	3.7	271	1952	2	7335	3.7	271						
55033	1	15	7261	4.2	305	1950 1951 1952 1953 1954 1955	5 3 1 2 2 1 1	7790 6405	4.4	293 358 359 293 377 287 282						
56255	1	1	11250	4.0	451	1949	1	11250	4.0	451						
57338	23	70	9513	3.B	060	1951 1952 1953 1954 1955 1956 1957 1958	12 15 9 5	10049 10133 10227 9133 9971 10216 10588 10350	3.7 3.6 3.9 3.6 3.7	367 353 381 381 390		7420	297	1	12241	47:
60420	9	14	8412	4.2	352	1951 1952 1953 1954 1955 1956	2 4 2 2 2 2	8600 8660 8715 7250 7825 8910	4.1	342 355 372 320 338 370						
61046	6	10	8/53	4.1	356	1950 1951 1952 1953 1954 1955	1 3 2 1 1 1	9550 8620 10040 7710 10560 7310 10530	4.4 4.0 4.1 3.9 4.1 4.3 3.8	427 541 406 305 433 311 391						
61091	1	1	11970	4.2	499	1950	1	11970	4.2	499						
61571	1	1	3840	3.9	151	1949	1	3840	3.9	151						
62233	39	130	9127	4.0	369	1947 1948 1949 1950 1951	7 6 10 10	10481 8713 9200 9903 7366	4.0 3.9 4.0 4.1 4.0	415 341 369 403 372	1 1	0د، ۱۵۰ ۱۵۹۹۵				

TABLE 15.--OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

51 KE NO.	DAUGHTERS	RECORUS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.		MILK	FAT	YEARLY HE RECORDS NO.		FAT
						1952 1953 1954 1955 1956 1957	ДҮКSF 17 19 16 12 9 9	11RE 10078 8929 9253 10529 9506 9530 10208	4.0 4.1 4.0 4.1 4.2 4.0 4.1	404 363 373 435 393 382 419	3 1 3 2 4 3 2	11313 12160 11083 9615 11028 8847 10920	486 511 430 379 425 342 441	1 1 2 1	6486 6148 7783 10933	249
62613	12	27	8963	4 - 1	370	1953 1954 1955 1956 1957 1958	? 3 8 5 1 2	9485 9250 8781 8246 9376 9880	4.5 4.0 4.2 4.2 4.0 4.0	421 367 372 345 378 390	1 2 2 3	7140 8780 8860 10840 11530	259 338 387 435 447	1 1 2 2 3 1	8099 9178 9669 9407 9032 11233	384 363 431 415 352 446
62636	24	ią ią	8615	4.1	349	1954 1955 1956 1957 1958	7 9 13 7 3 5	7876 8340 8775 9531 9890 8286	4.0 4.1 4.1 4.2 4.2 3.8	317 346 357 396 411 311	2 1 2 2 5	10110 11620 9680 8190 8324	417 460 377 337 324	. 2 1 2 2 2	7968 9145 9679 8867 8524	401
63144	. 1	7	6971	3.9	273	1950 1951 1952 1953 1955 1956	1 1 1 1 1	6990 7460 9880 7130 5880 6840 4620	4.1 3.9 4.0 4.0 3.8 3.0 3.7	263 290 399 283 224 258 173						
63147	88	151	9833	4.1	403	1953 1954 1955 1956 1957 1958 1959	4 15 30 32 26 15 22 7	8605 9701 9325 9292 10200 10091 10374 13563	3.7 4.1 4.1 4.1 4.1 4.1 4.1	321 394 383 380 413 416 429 548	2 5 6 11 11 22 5	7725 9872 7342 9746 9019 9660 10188	335 401 310 402 372 388 422	1 3 5 11 11 22 4	10944 8713 8559 9244 9104 9960 11132	438 360 361 381 363 404 458
63406	5	20	8042	4.3	343	1947 1948 1949 1950 1951 1952 1955	6 3 5 2 1 2	7783 8207 8552 8595 8600 11395 6300	4.3 4.1 4.4 4.5 4.2 4.5	334 333 381 379 362 507 251						
63417	5	10	8450	4.0	338	1951 1954 1955 1956 1957	2 3 2 2 1	8800 7817 9680 8335 10050	4.0 4.2 4.0 3.7	351 312 401 334 369						
63426	28	56	9368	4.2	396	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 6 11 9 10 4 7 2 4 2	8360 8468 9305 9030 10200 8050 9351 13085 13915	4.8 4.2 4.1 4.2 4.2 4.2 4.2 4.1 4.2 3.9	402 351 386 377 426 335 387 534 594 553	1 1 1 2 2	9010 11050 11370 12520 10680 10900	344 415 431 485 428 435	1 1 2 2	9483 9178 10028 9630 10998 9941	364 363 398 388 449
64885	3	8	8124	3.9	319	1951 1952 1953 1954 1957	2 2 2 1	8020 9380 8455 7010 7320	4.0 4.1 3.6 3.8	320 376 345 252 277	1	7610	294	1	8469	337
65548	20	37	10377	4.1	424	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 0 1 4 4 4 2 1 3	9043 10204 11237 10220 10280 12433 11350 11675 1250G 9723	4.2 4.0 4.1 4.1 3.8 3.8 3.7 4.2	379 426 450 416 422 467 426 448 460 407	4	11910	hAS	3	10508	1695
65610	2	3	7835	4.0	307	1954 1955	2	7310 10520		296 398	3	11710	40.5	3	70300	422
65761	2	7	6596	3.7	245	1948 1949 1950 1951 1952 1955	1 1 2 1 1 1 1 1	5840 11250 6420 6700 5940 4690	3.3 4.0 3.7 3.8 3.6 3.7	195 446 236 256 227 171						
67174	3	14	8712	J.9	344	1951	1		3.9							

TA

EMONE							2	2								
BLE 15.							ARTIFICIA STATE ON		DING C	RGANI	ZATIONSG	ROUPED	8Y BR	ŁΕυ,		
	DAUGHTER	AVERAGL	8Y SI	RE			RECORD AV	ERAGE	8 Y SI6	E BY	FRESHLNING	YEAR				
SIRE NO.	DAUGHTERS	RECORDS	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY RECUROS NO.		FAT	YEARLY H RECOROS NO.		FA
						1952	AYRS 2		3.9	322						
						1956	ì	8790	4.0	354						
67479	25	44	8801	4.0	355	1953 1954 1955	3 13 13	8993 8708 8448	4.0 4.0	371 346 341	2		399	1	9178 9189	35
						1956 1957 1958	8 5 2	9331 10290 9595	4.0	375 411 379	3 2 1	9590 11720 11370	38 I 4 78 4 3 3	2 2 1	9876 9821 10486	39
67757	12	25	7838	14 ° 14	340	1951 1952 1953	1 2 1	9650 9735 7500	4 - 1	407 394 361						
						1954 1955	0	7105 8067	4 - 1 4 - 4	289 35 I						
						1956 1957 1958	5 2 1	7676 8765 5940	4.1	358 409 241	1	7430	297	1	7477	23
40.00			70.45		70.	1959	1	4690	3.9	184	i	6530	261	i	7194	
68188		2	7465		305	1950 1952	1	6090 8840	5.9	267 343						
68334	5	11	7528	4.1	309	1951 1952 1953	2 2 4	7155 8385 8278	4.1	333 344 334						
						1954 1955	2	7715 6660	3.7	283 267						
70104	15	27	7928	3.9	313	1954 1955	6 8	7023 8796	4.0	275 353						
						1956 1957 1958	8 2 2	8223 8410 8680	3.9	329 329 323	2	9025	372	2	9249	31
70		. 7	0.7.70		77.	1959	1	8800	3.7	325	Ī	9070	359	Ī	9777	
70259	10	13	8330	4.0	336	1954 1955 1956	2 7 3	9115 7903 9490	4.1	343 324 395						
70368		1	9350	4.1	381	1957 1953	1	6130 9350		26 I 38 I						
70760	9	19	8199	4.4	355	1953 1954	5 2	8432 7390		371 316						
						1955 1956	3	8442 8 90 0	4.1	371 367						
						1957 1958	2	9520 11725	4.1	391 480						
70975 71191		7	6670 8407		330 330	1949	1	6670 10790		330						
11141	2	,	6407	3.4	220	1953 1954	3 2	8417 8230	3.9 3.6	332 293						
71763	6	10	8577	4.1	345	1955	1	5920 6900	4-9	226 340						
						1952 1953 1954	2 3 2	9580 8305	4.0	378 384 324						
						1955 1959	1	5370 6620	3.9	209	i	7600	304	1	7630	3 1
71810	2	2	9585	4.5	424	1955 1956	i 1	10970 8200	3.9 5.1	427 421						
72686	2	14	9149	4.6	417	1953 1954	1	10520 7900		543 368						
						1955 1956	1	7820 9550	4.4	344 416	1	1870	5 8			
7 32 93	3 27	56	8479	4.2	358	1952 1953	1 10	7980 8270	4.2	349 346						
						1954 1955 1956	12 11 10	8858 8237 9518	4.3	378 354 400	1	9330 10770 9750	38 I 484 404	1	10944 10889 10453	14.1
						1957 1958	6 3	947 <i>3</i> 10 1 03	4.2 4.3	393 435	i	8180 9110	346 376	i	10540	
7402	1 40	67	8982	4.1	370	1959	1	11330	4.5	500 482						
						1954 1955 1956	9 11 13	9669 8051 8275	4.0	395 326 337	2 2 3	9690 10850 9153	415 443 374	I 1	9178 10257 8900	40
						1957 1958	13 10	9427 9563	4.2	394 390	7 7	106 7 3 93 7 9	432 367	6 7	9305 8863	39 36
						1959 1960	6 4	7878 9465		328 370	5 4	9036 9443	356 404	3	9655 9211	
74.137	. 1	1	6010	2 0	240	1050		4010	7	2-0		70.70	0.4.1	,	. 000	22.7

1959

1

6910 3.0

11140 4.1 11300 3.7 8123 4.0 9410 4.1 6113 3.7

200

7270 261

6998 271

74136

74223

1

- 1

21

6910 3.8 260

9600 4.0 387

VERMONI

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL NO.	UAUGHTERS NO.	KECOKDS NO.		TLST PCT.		FRESH YEAR	MO.		TEST PCT.		305-OAY RECORDS NO.	MILK		YEARLY HI RECORDS NO.	MILK	
						1955 1956 1957 1958 1959	AYR 51 2 2 2 3 2	HIRE 10740 7995 11905 11523 9915	3.2 4.3 4.1 4.1 4.1	345 343 484 476 409	 	11160 11130 10740 9560	433 425 439 378	1 1 2	9995 10366 9576	396 416 378
74431	¥ 9	16	8443	4.2	347	1954 1955 1956 1957 1958 1959	1 3 4 4 2 2	6450 7930 9243 8100 9725 9350	4.2 4.3 4.2 4.0 4.0 4.0	271 341 385 326 366 362	1 1 1 2		425 437 405 539	1 1 2	9995 10344 9462	398 416 373
74535	38	57	9555	4.1	393	1956 1957 1958 1959 1960	9 10 15 21 2	9116 9525 10109 10035 10125	4.0 4.0 4.1 4.1	305 379 416 413 437	2 3 12 19 2	10805 10723 9745 9948 10125	457 425 400 404 418	2 2 10 19 2	9211 9532 9787 10385 10775	383 377 403 424 437
76613	3 40	83	9759	4.1	399	1952 1953 1954 1955 1956 1957 1958 1959	3 8 23 17 12 8 5	9000 9994 9298 9881 10095 10643 10290 10399	4.7 4.2 4.1 4.0 4.2 3.8 3.8	422 418 384 408 408 443 359 394	1 3 2 1 4 4	8000 8110 7480 9960 10115 10550 9737	296 332 292 386 423 436 399	2 2 3 4 3 7	8688 10061 9211 8876 8464 9316 9980	
78114	4 14	27	10162	4.1	410	1954 1955 1956 1957 1958 1959	2 4 0 7 4 2	7995 9550 9368 11756 10238 10980	4.4 4.2 4.1 4.1 4.2 4.1	348 395 377 480 427 447	1 14 14 5 1	10460 9245 10540 9827 7750	428 366 425 412 322	1 3 4 4 2	9428 9505 9685 9129	376 381 390 375
78927	7 56	95	9281	4.0	372	1953 1954 1955 1956 1957 1958 1959 1960	3 8 15 15 16 18 18 2	7967 8505 8347 8923 10931 9248 9552	4.2 3.9 4.0 4.1 3.9 4.0 4.0 4.1	337 338 338 364 420 307 379 435	1 2 1 7 12 15 2	7860 10804 9025 9473 10935	433 415 314 427 368 380 429	1 3 4 12 16 2	9178 9145 9524 8857 9585 10274	352 361 378 355 380 411
79186	5 2	2	9040	4.1	367	1957	2	9040	4.1	307	1	9090	372	1	6911	280
80379	9 8	9	9363	4.0	375	1956 1957 1958 1959	1 3 2 3	5360 9447 9850 10830	4.2 4.0 3.9 3.9	224 384 382 425	1 3	10820 9847	445 403	3	9948	402
81145	5 12	19	9543	4.2	389	1953 1954 1955 1956 1957 1958 1959	1 3 4 4 2	10420 9670 8500 9215 10168 12985 14950	4.0 3.9 4.3 4.3 4.0 4.3 3.5	914 381 356 391 399 548 525	1 2 2	10380 13070 11785 10710	407 475 470 419	1 2	9995 11336 12099	398 443 474
82620	0 6	6	10015	4.2	426	1959 1960	3 3	10660 9970	4.5	400	3 3	10453 9253	426 384	3 3	9872 9574	404 401
82628	8 13	17	8556	4.3	365	1955 1956 1957 1958 1959 1960	2 7 2 3 2	5745 8521 9925 9647 10100 9630	4.4 4.2 4.1 4.1	250 351 408 396 476 419	1 1 2 2	10200 11620 9745 9460 9040	390 469 406 398 371	1 1 2	10028 10093 9729	398 388 396
8422.	3 3	4	10860	3.9	422	1957 1959		12310 10613			2	10610	418	3	10257	398
8497	8 23	37	8002	4.3	344	1954 1955 1956 1957 1958 1959	12 6 9 3 4 1	7190 6932 8638 9386 9540 10960 8700	4.3 4.2 4.3 4.1	307 293 370 383 402 484 331	1 3 1 2	13680 9827	514 404 463		10424	414 45?
8548	2 8	15	9632	4.0	383	1951 1952 1953 1954 1955 1956 1957 1958 1959	 1 3 2 1 2 2 1 2	9950 7930 8393 7505 8870 9175 9920 8770 12010	4.3 3.9 4.0 4.0	405 319 354 314 378 355 393 354 454	1 1 2	9450 9940 10745	349 385 412	1 1	6012 7990 11342	319 314 445
8639	0 42	49	9241	4.3	397	1956 1957 1958 1959	6 12 17 10	7780 10094 9437	4.5 4.2 4.2 4.5	343 426 395	1 3 12 10	8020 11387 10218 9958	352 486 429	1 2 9	9363 9200 9671 10415	403 372 412

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY YEAR OF FRESHENING--RECORDS FROM THIS STATL UNLY

DAUGHTER AVERAGE BY SIRE RECURU AVERAGE BY SIRE BY FRESHENING YEAR

SIRE NU.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECURDS NO.			FAT L8.	305-DAY RECORDS NO.			YEARLY HE RECORDS NO.		FAT
						1960	AYKSI 2	HIRE 7875	4.2	328	1	9900	403	1	11423	467
8689	8 32	1 4 14	8921	4.1	363	1954 1955 1956 1957 1958 1959	2 b 14 13 3 4	7225 8309 8721 9768 9143 11150	4.0 4.2 4.1 4.1 4.0 4.0	290 339 358 397 364 443	1 3 6 1 4	10990 5870 9918 7440 9308	452 235 400 290 423	1 1 5 1	8840 10126 9692 7619 8723	356 415 393 312 398
8/50	3 28	40	10034	3.9	388	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 1 1 4 3 3 3 8 8	12050 12730 12650 10105 9543 11203 9733 9394 10344	3.6 3.8 3.9 3.8 3.7 3.8 3.8 4.0 3.9	437 403 490 390 358 428 373 379 400	1 1 1 7 16	102 50 105 70 7960 10620 9101 9806	401 431 388 414 382 392	1 7 16	91/8 9995 9592 10081	352 398 382 404
8750	L	16	8039	3.8	306	1952 1953 1954 1955 1956 1957 1958	2 3 3 3 2 2 2	7860 9203 8173 8507 8470 8600 7590	3.8 3.8 3.9 3.8 3.9 3.7 3.6	297 351 315 329 328 320 275						
8935	3 11	15	8240	4.2	34/	1956 1957 1958 1959 1960	3 2 5 4 1	8317 7975 7804 8555 11280	4.2 4.6 4.4 4.1 3.9	350 368 340 350 445	1 4 1	9750 9640 10600	412 390 432	1 4 1	9712 10535 10028	388 426 419
9188	ا ک	11	8963	4.3	385	1959 1960	9 2	9302 8750	4.3 4.4	394 385	8 2	10183 11330	417 470	9	10494	419
9217	3 1	1	7870	4.1	323	1958	1	7870	4.1	323	1	11030	455	1	10159	387
9406	6 4	6	7344	4.0	296	1954 1955 1958 1959	2 2 1 1	8035 7270 6060 5210	4.0 3.9 3.8 4.0	322 284 232 208	1	7420 6510	297 260	1	7477 7194	292 2 7 6
9423	9 2	4	10392	3.9	399	1953 1955 1956	2 1 1	9625 12920 12640	3.9 4.0 3.8	369 514 477						
9442	3 33	41	9965	4+1	399	1956 1957 1958 1959 1960	5 8 9 14 5	11502 9265 10196 9705 10436	4.0 4.2 4.0 3.9 4.5	466 386 411 382 421	1 5 14 5	12020 10560 11326 10169 8970	507 421 448 406 369	1 1 5 14 4	10638 11173 11103 10506 10633	439 453 436 420 435
9536	8 2	3	9130	4.1	368	1957 1958	1 2	9780 9470	3.8 4.1	376 380	1	8040	344	1	0240	331
9538	4 37	47	9625	4.3	414	1957 1958 1959 1960	2 11 29 5	9820 10181 9759 9376	4.6 4.3 4.4	451 434 415 406	1 10 28 5	9200 10913 10436 10084	413 455 422 405	1 6 29 3	7968 10695 10472 10769	372 453 426 440
9555	7 3	ц	7900	4.1	321	1958 1959 1960	1 2 1	6990 7775 9340	4.0 4.1 4.4	277 316 409	2	9455 9600	364 418	2	10 18 1 1 12 6 0	412 444
9652	6 I	2	10240	3.8	390	1959 1960	1	9440 11040	3.6	343 436	1	8150 9540	332 366	1	9527 8785	377 364
9836	7 1	1	11850	4.2	499	1959	1	11850	4.2	499	1	11910	462	1	10508	422
10152	7 35	38	10157	4.2	423	1957 1958 1959 1960	1 6 27 4	11330 10376 9869 12383	4.2 4.1	467 434 407 510	4 27 4	8708 9669 11353	362 388 449	4 27 4	9221 10307 11410	371 413 458
10260	0 1	2	8895	4.2	369	1957 1958	1	8620 9170		364 374	1	9250 10750	376 441	1	7652 9167	300 360
10260	1 5	9	9646	3.8	368	1956 1957 1958 1959	3 1 2 3	10030 10300 10300 9470	4.0 4.0 3.6 3.6	405 409 368 347	1 1 3	11550 9740 10487	437 384 414	3	10955	431
10260	7 10	14	9462	4.1	388	1956 1957 1958 1959 1960	1 3 4 4 2	7480 9613 10898 9293 8915	4.2	363 419 456 366 353	1 1 2 4 2	8770 9710 9890 10448 10270	306 371 40d 400 383	1 1 2 4 2	8415 8448 10192 9851 9167	343 344 408 395 362

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY ERESHENING YEAR 305-DAY CONTLMP. AV. YLAKLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LG. LB. NO. LG. LB. SIRE DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. AYRSHIRE ī 1 9720 4.3 417 1 9720 4.3 417 1 9620 382 8709 348 2 8305 4.4 7920 4.4 8690 4.3 1959 11761 2 12725 4.2 529 1 12980 1 12470 12980 4.0 12470 4.4 11840 464 1 12350 3.8 470 1 10990 458 1 11183 458 I 1 12350 3.8 470 я 8 10348 4.2 433 4.2 հեն ևև 7 8630 4.1 7875 4.2 329 9540 4.2 6210 4.2 B 9478 4.2 392 1959 12230 4.5 4.1 4.1 486 10805 4 46 110758 5 6 8430 4.1 352 9390 4.2 9065 4.4 8620 4.0 9765 401 9735 401 376

8530 4.0

 TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE O	AUGHTEKS NO.	RECORDS NO.		TEST PCT.			KECOROS NO.	LB.	TEST PCT.		305-UAY RECURDS	MILK	FAT	YEARLY H RECOROS NO.	MILK	
219946	34	92	7740	4.5	350	1947 1948 1949 1950 1951 1952 1953 1954 1955	52 14 15 8 11 6 4 1	7558 8319 8627 8635	4.5 4.6 4.4 4.4	358 375 383						
23/701	16	42	7 104	4.8	338	1949 1950 1951 1952 1953 1954 1955 1956	1 1 8 6 8 7 4 6	10120	4.4	360						
242739	1	1	14250	4.2	604	1950	1	14250	4.2	004						
243870	2	5	7803	4.9	371	1950 1952 1953 1954 1955	1 1 1 1	8140	4.8 4.3 5.1 5.0 4.5	392						
251248	1	4	8133	4.7	384	1948 1949 1950 1951	1 1 1 1	7250 7840 8030 9410	4.4 4.8 4.8 4.9	320 377 382 458						
25 14 84	1	1	5920	5.5	324	1947	1	5920	5.5	324						
253115	1	1	8530	4.7	402	1953	1	8530	4.7	402						
256795	5	13	65/1	4.8	312	1947 1948 1949	11 1 1	6609 3810 6320	4 - 8 6 - 0 4 - 4	318 230 280						
25 89 35	2	7	7059	5.1	359	1951 1952 1953 1954 1955	2 2 1 1 1	6910 7655 9660 9190 9980	4.8 5.2 5.2 5.6 5.0	334 392 502 516 497						
259671	1	1	9120	5.4	492	1948	1	9120	5.4	492						
262792	1	1	6160	5.2	322	1947	1	6160	5.2	322						
262919	8	13	7463	4.7	346	1952 1953 1954 1955 1956	ц Э 2 I I	7505 8314 7510 7210 7230	4.5 4.7 4.7							
260583	29	00	7355	4-8	353	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 b 14 7 7 4 7 2	5345 5956 7308 7139 7480 6620 8093 9344 10090	4.7 4.6 4.4 5.0 4.5	275 279 354 334 347 295 407 423 472	1 2 2	6420 8065 8925	412	1 1 1 1 1 1 3	7467 6965 7150 7363 7161 8469	
280691	1	7	5726	4-4	253	1951 1952 1953 1954 1955	2 1 1 1 1	5360 6450	4.2 4.5 4.8 4.7	225 291 280						
280954	1	3	9510	4.9	463	1950 1951 1952	1 1	9450 9320 9760	4.7 4.9 5.0	454						
282648	26	(1	7148	4.7	33 (1947 1948 1949 1950 1951 1952 1953 1954	15 10 6 7 8 8 4	9025	4.7 4.8 4.7 4.6 4.7	317 312 353 360 361 401 443						
287749	1	6	7425	4.6	346	1954 1955		7030 8390	4.6	324 390						

VLRMONT

TABLE 15.--GAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

8Y YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE 8Y SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.	MILK	TLST PCT.	FAT	FRESH YEAR	KECUKUS NO.		TEST PCT.		SOS-DAY RECORDS		FAT	YEARLY H RECURUS NO.	MILK	
						1956 1957 1958 1959	GUERN 1 1 1	9180 7360 7090	4.7	250 434 334 346						
28196	7 (14	85/7	4.8	408	1951 1952 1953 1954 1955 1956	1 3 1 3 2 3	8720 8937 9090 7670 7620 8180 8290	5.7 5.1 4.8 4.5 5.0 4.9 4.2	497 455 457 344 383 401 344						
28809	5 I	3	9087	4 - 4	397	1951 1952 1954	1 1 1	10930 8650 7680	4.5 4.5 4.3	466 393 331						
28924	4 48	117	8128	4.6	375	1951 1952 1953 1954 1955 1956 1957	3 10 27 37 11 19 7	7467 8693 8480 8040 8033 8524 9610 8240	4.6 4.6 4.6 4.7 4.0 4.6 4.6	341 349 389 377 372 390 437 372	1 1 1	9710 9520 11160 10750	497 494 550 552	1 1 1 1	9461 8317 7014 9559 9461	479 425 456 483 403
28953	1 10	30	7893	4.9	385	1952 1953 1954 1955 1956 1957	8 6 6 3 5 2	7736 7965 8677 8127 8160 8660		390 396 424 358 386 359						
28956	3 4	8	7400	5.5	407	1952 1953 1954 1955 1956	2 1 5 1	7955 8540 6617 9420 7660	5.9 5.4 5.9 6.3	420 505 350 554 480						
29493	3 1	2	6945	5.0	347	1947 1948	1 1	6970 6920	5.1 4.9	353 341						
29 62 21	4 10	19	8661	4.9	418	1952 1953 1954 1955 1956 1957	l 3 5 3 2	9370 8476 8620 8196 8913 9135	4.8 5.2 4.9 5.0 4.8 4.3	451 439 425 404 429 395	ı	10800	450	1	10922	440
29 o 2 1 i	6 13	23	9658	4.4	421	1953 1954 1955 1956 1957 1958 1959	1 4 7 3 2 2 4	7340 6875 9211 9887 10265 7545 11920	5.2 4.6 4.5 4.6 4.8 4.0 4.1	384 314 414 450 494 344 492	1 1 1 4	12320 10170 9020 13330	588 520 486 507	 	9963 9330 11952	
29916	5 47	100	7511	4.9	372	1952 1953 1954 1955 1956 1957 1958 1959	3 8 14 20 26 17 9	8653 7681 7241 7535 7797 7260 8796 10500	4.9 5.0 4.9 4.9 5.0 5.1	415 384 356 371 380 364 450 613	1 5 0 4 2	7380 8874 8515 8445 8610	362 442 428 376 378	2 1 3 4 4	8578 9679 8898 9873 8968 7314	405 470 437 442 424 328
30020	8 8	22	8325	4.9	402	1952 1953 1954 1955 1956 1957	3 4 3 5 2 2		4.9 4.7 4.6 4.8 5.2	433 412 430 387 331 498 460						
30262	5 3	6	7389	4.8	350	1953 1954 1955	2 2 2	7560 7445 7540	4.9 4.5 4.7	365 333 353						
30854	8 2	5	8681	4.2	372	1956 1957	3 2	8617 8210		377 324						
31269	0 16	†† ††	8134	4.8	389	1951 1952 1953 1954 1955 1956 1957	4 6 9 8 6 3 7	7675 8475 8653 8424 7722 6733 8637 8160	4.6	379 418 426 411 365 306 394 379	1 1 4	6690 7910 9835 8940	383 378 457 451	1 1 2 1	6813 8993 7543 9505 8219	419 355 428
31301		1	3830		164	1955	1	3830	4.3	164						
31327 31627		9	6400	4.9	315	1950	1	6400	4.9	315 071						
31021	, 2	Y	7161	4.9	347	1952 1953	1	5340 9460	5.1 4.9	274 467						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

					ROS FR		STATE ONL		1 V (10	e av	FRESHENING	VEAD				
Ū.	AUGHIEK	AVERAGE	91 21	KE		K	ECOKU AVE	KAGE .	31 SIK	L 01			. AV.	YLARLY H	ERO AVE	RAGE
STRE DA	NO.	RECOROS NO.		TEST PCT.		FRESH YEAK	RECORDS NO.	L8.	TEST PCT.		RECORUS NO.		FAT	RECOROS NO.	MILK	
						1954 1955 1956 1957 1958	GUERN 2 1 2 1 1	7005 6780 6840 8430 7190		362 340 319 381 330	1	4050 10110	182 413	1 1 1	7761 6213 7848	281
316996	1	3	7200	4.8	349	1955 1956 1958	1 1 1	7860 6460 7460	4.9 4.6 4.9	388 297 362						
3173 ∤8	5	16	6621	4.8	315	1948 1949 1950 1951 1952 1953 1954	1 2 1 3 3 2 2 2	5550 6630 6630 6470 6650 8205 6240 7190	4.7 4.9 5.1	284 306 327 329 312 392 299 338						
316026	33	53	7376	4.6	339	1952 1953 1954 1955 1956 1957 1958 1959	2 8 9 11 10 5 4	7091 7126 6825 6880 6823	4.9 4.5	423 359 321 343 312 323 314 376	1 1 3 3	9400 9860 8803 8803	474 484 403 374	1 1 2 3	8535 8927 9075 8793	415 419
318968	31	53	7537	4.7	356	1953 1954 1955 1956 1957 1958 1959	1 11 13 11 6 5	7331 8061 7093	4.5 4.8 4.7 4.7	295 358 353 387 336 365 364	1 4 1	9250 6925 7190 9370	476 320 367 441	1 3 1	9014 8542 8306 9854	
321300	2	5	7449	4.2	316	1953 1954 1955	2 2 1	8210	4.2 4.3 3.7	294 350 249						
323584	9	21	6932	4.6	315	1953 1954 1955 1956 1957 1958	1 6 4 0 3 1	9060 6762 7290 7665 8093 5540	4.7 4.8 4.5 4.1	493 314 345 337 333 216						
324250	1	3	9543	4.6	446	1952 1953 1954	1 1 1	9640 9930 9210	4.8	435 478 424						
331204	2	4	6639	4.7	308	1954 1955 1956	2 1 1	6485 7820 7340	4.8	299 372 352						
332293	1	1	11550	4.8	553	1955	1	11550	4.8	553						
333456	2	5	9740	4.7	459	1954 1955 1957	. 2 2 1	10390	4.7 4.9 4.7	450 506 377						
3344 13	14	26	8226	It . It	358	1953 1954 1955 1956 1957 1958 1959	1 8 3 4 2	8653 7800 9775			1 1 1 1 3	8750 4690 8030 9130 9670	335 361	1	8589 11467 10878 10068	433
335736	2	6	6834	5.0	340	1953 1954 1955 1956 1957	2 1 1 1	3910 7260 7280	4.9 5.0 5.0 5.0 4.8	357 195 363 366 348						
336395	2	15	8669	5.2	447	1950 1951 1952 1953 1954 1955 1956 1957	1 2 2 2 2 2 1 2	8980 8255 9980 8130 8280 7180 8605	5.0 5.2 5.5 5.4 5.1 5.1 5.1 5.0	534 415 418 367 427	1	7080	343 403 313 374	1 1 1 1	8851	476 432 450
337117	41	51	6586	4.8	315	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 3 12 11 1 3 7 8 3	8177 5965 5403 5230 7933 7006 7663	4.8 4.8 4.4 4.7	289 263 228 378 323 371	1 7 3		363	1 4 3	8143	404 380 469

354137 2 2 6205 4.9 304

354224 2 2 7125 5.2 367

TABLE 15. -- DAUGHTER-AVENAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

	OAUGHTER	AVERAGE	8Y S1	RL		R	CCURD AV	.kAGE i	3Y 51R	E 8Y	FRESHENING					
SIKE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECURDS NO.	MILK L8.	TEST PCT.	FAT LB.			FAT	YEARLY HI RECORDS NO.		
						1960	GUERN 2		5.1	409	2	9170	431	2	8889	416
337446	7	17	7920	5.0	392	1951 1952 1953 1954 1955	5 1 2 2 2	8750 7894 7190 8350 8370 9790		421 397 361 374 383 454						
3380 35	8	12	5753	4.7	266	1952 1953 1954 1955 1956 1958 1959	1 2 3 3 1 1	7440 6865 5253 5840 6080 6790 6570	4.5 5.2 5.1 4.3 4.0 4.1 4.2	335 350 266 249 245 280 279	1	6380 7 2o0	297 308	1	7674 7314	349 328
340080	j li	6	7.544	5.1	371	1956 1957 1958 1960	1 2 2 1	6690 6695 7880 8590	5 - 1	312 361 396 423	1 1	7440 9610 9470	345 487 464	1	7183 9276	323 452
340083	3 3	3	7930	4.7	375	1957 1959	1 2	8110 7840		366 380	1 2	9180 10365	410 431	1 2	8731 9887	
340243	} 4	11	7327	4.5	325	1953 1954 1955 1956	3 4 3 1	7330 7123 7953 7970		310 313 358 304						
340985	6	17	8416	4.8	404	1951 1952 1953 1954 1955 1956 1959 1960	1 2 3 3 3 2 2 2	8140 8205 8267 9100 8180 10395 7820 6570	4.8 4.9 4.7	350 394 400 439 405 491 345 262	1	9250 7970		ì	8796	37 à
342952	2	8	9400	4.8	452	1952 1953 1954 1956 1957 1958	1 2 2 1 1	10470 9320 9985 10030 8790 7420	5.0 4.9 4.8 4.6 4.5	525 456 478 464 394 358						
34484	7	19	8065	4.9	391	1952 1953 1954 1955 1956 1957	3 4 2 3 5 1	7453 7925 7505 8080 8598 9340 7660		348 392 331 400 403 419 348						
346708	3 6	11	8005	4.9	394	1951 1952 1953 1954 1955 1957	1 1 2 2 2 3 1	5450 6490 7100 7575 7307 10890 11330		284 335 335 353 341 622 660						
346851	5	9	8003	4.9	393	1952 1953 1954 1955 1956 1957 1958 1959	1 1 1 1 2 1 1	8170	5.3 5.1 4.8 4.6 5.0	427 427 418 470 408 469 400 294	1	3690 6330		1	8077	298
349648	з ц	8	8825	4.8	419	1955 1956 1957 1958 1959	1 3 1 2	6820 7573 7690 9545 12620	5.1	362 363 395 450 568	1 1	9730 9590	458 434	1	9450 102 7 9	
35070	3 1	1	8540	4.1	350	1956	1	8540		350	1	5710	237			
353∠00	i 12	15	7220	4.7	341	1955 1956 1957 1958 1959	1 1 3 2 6 2	6260 11050 7257 6085 7135 8965	4.6 4.4 4.4 4.7	306 510 319 263 340 452	 1 2 6 2	5960 6670 6510 9758 8220	266 321 303 378 393	2 6 2	7674 8737 8942	359 390 423

1952 1 6520 4.7 307 1954 1 5890 5.1 300

1 6860 5.2 357

1953

TABLE 15.--OAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRZED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

63

DAUGHTER AVEKAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-0AY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
						1957	GOERN	7390	5.1	376						
354788	8 1	1	8790	4.8	423	1953	1	8790	4.8	423						
357749	9 8	10	8468	4.5	375	1954 1956 1957 1959	1 3 1 5	8830 8903 9410 8226	4.1 4.3 4.0 4.5	364 385 379 372	5	8474	356	5	9173	385
35831	1 3	4	9255	4.3	390	1956 1957 1959	2 1	8595 9360 10400	4 . 4 4 . 4 4 . 0	372 409 413	1	10560	423	1	10682	419
358718	В 1	1	5800	5.0	287	1956	1	5800	5.0	287						
359070	0 14	28	7620	4.9	368	1950 1951 1952 1953 1954 1955 1956	2 3 4 6 5 3 5	6915 7743 8255 8802 5774 8083 7530	4.8 4.9 5.1 4.7 4.7 4.8 5.0	332 384 418 418 266 386 379						
360369	9	21	8043	4.7	382	1953 1954 1955 1956 1957 1958 1959	1 4 5 5 2 2 1 1	8710 6875 6726 8490 8160 9100 9080 10700	4.9 4.7 4.6 4.8 5.1 5.3 4.9 5.0	424 326 309 403 410 485 442 531	1 1 1	9670 10020 9170	476 421 477	1	9396 9527 10475	435 423 489
361493	3 14	26	8274	4.5	371	1953 1954 1955 1956 1957 1958	1 10 3 5 5 2	9920 8570 7853 7740 8094 8590	3.9 4.5 4.8 4.7 4.5	386 381 374 361 360 372	1 1 1 1	9850 7840 7820 8520	467 407 379 429	1	8349	390
362469	9 1	1	7480	4.4	329	1951	1	7480	4.4	329						
362599	5 3	8	7651	4.9	370	1954 1955 1956 1957 1958 1959	1 2 1 2 1	4490 8110 5190 7190 5240 7980	4.7 4.6 4.6 5.2 5.2	211 383 237 327 270 413	1 1 1 2 1	8560 8990 8030 10660 8540 8360	395 423 368 433 399 399	1	9450 7990	395 378
365457	7 17	34	7639	4.8	361	1953 1954 1955 1956 1957 1958 1959	3 7 7 8 4 3 2	7533 7904 7361 7979 7893 8830 9560	5.1 4.6 4.8 4.7 4.7 4.6	384 366 347 379 373 410 420	1 1 1 1 1 1 1	9040 8170 5790 6810 9610 7510	428 430 334 337 477 364	1	9396	435
366876	6 14	28	7206	4.8	343	1954 1955 1956 1957 1958 1959	2 5 5 3 9 2	5675 6480 6752 7427 8399 6765 8580	5.3 4.5 4.7 4.4 4.6 5.2 4.9	297 295 312 327 383 352 417	2 2 1 5 2	8345 8690 9600 8914 7580 8275	373 410 449 422 368 393	2 2 1 5 2	7739 9069 7913 8537 8579 9107	341 425 376 394 413 438
369578	8 2	5	8269	4.3	351	1952 1953 1954 1955 1958	1 1 1 1	8310 10590 10830 10380 6510	4.1 4.5 4.1 3.8 4.4	337 480 444 396 287						
37340.	3 9	18	8087	4.8	393	1952 1953 1954 1955 1956 1957 1958 1959	1 2 4 3 3 3 1 1	9260 8575 9170 9553 7237 8903 8380 5350	4.8 5.2 5.4 4.8 4.8 4.7 5.3	444 441 494 450 350 419 445 235	1	8930 8160	419 351	1	8796	376
37340	4 16	29	7268	4.5	325	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 8 4 2 3 3 3 3	6710 6415 7200 7605 7773 6420 7477 8493 9605	5.4 4.4 4.4 5.2 4.4 4.4 4.4 4.8	364 275 315 376 339 262 324 397 402	2 2	7945 11330	366 518	2 1	885 I 999 5	408 473
37340	5 1	6	7783	4.8	367	1954 1956 1957 1958 1959 1960	 	9630 7000 7770 7570 7600 7130	3.0 5.0 4.9 5.0 5.0	362 349 378 301 383 349						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

	OAUGHTER	AVERAGE	84 71	۷.		Н	RELORO AVI	ERAGE 8	HIC YE	E BY	FRESHENING	YEAR				
SIKE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECURDS NO.				RECOROS		FAT	YEARLY HE RECORDS NO.		FAT
							GULRI	NSEY								
375111	ų	9	8883	4.8	422	1952 1953 1954 1955 1956 1957	2 2 2 1 1		4.8 4.9 5.0 5.2	448 426 317 397 398 362						
375194	1	1	7820	4.9	386	1953	1	7820	4.9	386						
375229	5	13	7276	4.8	347	1955 1956 1957 1958	5 4 2 2	7676 7565 6675 6145	4.7	3/2 355 332 300	2 2 1 2	8370 7490	343 401 361 396	2 2 1 2	8225 8055 7521 8393	382 350
379750) 1	3	10077	5.1	516	1951 1952 1953	1 1 1	8370 10910 10950		416 566 567						
382002	. 5	11	9430	4.8	451	1954 1955 1956 1957 1959	2 1 2 2 4		4.4	324 436 447 436 577	1		608 315 510		10715 7183	
38 37 18	1	5	7020	4.5	315	1952 1953 1954 1955 1956	1 1 1 1	6550 7290 5570 8360 7330	4.5	281 329 257 398 311						
385485	1	2	10260	5.1	511	1955 1956	1 1	10660 9860		562 471						
390189	2	2	4515	4.2	190	1950	2	4515	4.2	190						
390190	8	9	9384	4.3	398	1958 1959	2 7	9250 9409	4.3 4.3	395 395	2	7570 10203	352 459	2	8388 9174	
391225	1	1	8740	5.4	470	1954	1	8740	5.4	470						
391470	53	81	8578	4.7	405	1954 1955 1956 1957 1958 1959	4 22 20 18 6 9 2	8291 8255	4.3 4.8 4.7 4.8 4.8 4.6 5.2		5 5 3	7110 9664 8206 9403 10120 11100	371	1 1 5 5 3 6 1	9145 7129 8118 8286 9272 10112 10562	327 360 371 460 473
394541	26	40	7390	4.9	362	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 6 3 3 1 4 6	8633 8459 7785 6940 9770 9150 7628 7275 6650 5375	4.7 5.1 5.0 4.9 4.7 5.0 5.1	404 399 398 350 478 428 378 368 332 262		10950 7820 7876 7610	435 366 368 317	3 5 5 2	10293 8393 8731 7745	366 405
3956 15	3	3	6447	4.8	317	1952 1956	2	6195 6950	4.9	312 328						
396068	3 20	35	8056	5.2	417	1954 1955 1956 1957 1958 1960	1 8 5 11 8 2	6290 6910 8558 10215 10788 7495	5.2 4.9 5.3				361 335 481 437 369	1 1 5 3	/129 /107 10440 8197 638/	322 467
396943	2	3	8100	4.7	383	1956 1957	1 2	6070 8995	4.5 4.8	273 435	1	7920	398	1	10257	391
398391	2	7	7969	4.9	395	1955 1956 1957 1958 1959	2 2 1 1 1	8570 7490 9360 9520 9200		434 364 473 524 464						
404003	3 20	54	7780	4.7	367	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 6 9 6 9 5 3 3	7547 8177 8896 7487 7403 7656 8698 8090 9793 7830	4.6 4.7 4.7 4.6 4.7 4.9	366 375 422 353 340 361 422 372 480 376	1 1 1 2 1 1 2 1	8500 8370 9290 6380 8275 8640 5960 10415 8370	415 438 490 336 419 449 303 482 403	1 2 1 2 1 2	9886 8851 7565 8453 7586 8535	458 432 364 403 351 409
404431	8	24	7572	4.8	361	1953 1954 1955	2 7 7	8370 7001 7393	4.7 4.9 4.9	395 338 358						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING DRGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8Y SII	RE		R	ECORD AVI	ERAGE !	RA ZIK	E 8Y	FRESHENING	YEAR				
SIRE ND.	UAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	HECURDS NO.		TEST PCT.	FAT	305-DAY (RECORDS NO.	MILK ONTEMP	FAT	YEARLY HE RECORUS NO.		FAT
							GULRI									
						1956 1957	5	7934 8480	5.1	433						
			7070		220	1958	1	6070		284						
409032		1	7230		372	1956	1	7230		372	,	10090	415	,	10442	h 1 3
409202		1	6590	5.2	343 490	1959	1	6590 11530		343 490	1	8000	371	1	10682 8829	387
410890		32				1959	'	9720		388	'	5000	311	•	0027	301
417939	12	32	7957	4.0	365	1952 1953	า 5 8	8122 7965	4.7	375 371						
						1954 1955	8	7743 9285	4.5	350 421						
						1956 1957	i	7410 11880	4.1	30 I 533						
						1958 1959	3	8590 8030	4.3	373 407	1	9470 9620	445 485	1	9854 9865	495 501
419988	1	2	5390	4.6	247	1958	1	4900		224	1	7210	317	1	8894	316
						1960	1	5880		269	1	8350	383	1	8840	389
420672	3	7	7620	4.4	337	1951 1952	1	6750 7380	5.2	325 381						
						1953 1954	!	5540 7120	4.8	281 344						
						1955 1957	1	9260 8680	4.2	419 364						
423102	1	1	7050	4.8	341	1958 1952	1	6970		296 341						
425345		3	8653		409	1956		8250		396						
	_					1957 1959	i	8960 8700	4.7	423 407	1	10280	395	1	10824	420
426363	š	4	9225	4.5	420	1958	2	8535	4.6	394	2	9590	433	2	9271	398
						1959	2	8555		371	2	9540	423	2	8333	335
426820 428155		1	6790 7050		335 392	1959	1	6790		335	1	8310	379	1	8829	307
431992		1	6946	5.6	351	1954		7050 5410		392 242						
431772	,	,	0740	3.0	331	1957 1958	i	9450 6450	5.1	486	1	11730	466	1	11467	395
						1959	2	6710		356	2	8120	401	2	8393	425
4444 17	1	1	7930	4 - 1	321	1959	1	7930	4.1	321	1	8290	380	1	8807	395
4444 18	1	1	7730	5.9	458	1956	1	7730	5.9	458	1	5710	237			
447277	1	1	6640	4.6	307	1957	1	6640		307						
451358		1	9330		408	1956	1	9330		408	ı	5710	237			
454224	2	3	8053	4.8	386	1958 1959	1	ย700 8165		432 389	1 2	7430 8240	342 376	1 2	8894 880 7	396 392
457382	2	3	6325	5.0	313	1955 1956	2 1	6310 7240		314 346						
457544	2	3	6828	4.6	316	1958		5490		254	1	7100	314	1	8894	396
	-	_	****		0.0	1959 1960	i	7390 7040	4.6	342 324	į	8320 8220	379 420	i	8785 9330	397
459489	2	2	8850	4.4	384	1959	2	8850		384	2	7780	385	2	9080	406
461736	1	1	6760	5.2	350	1959	1	6760	5.2	350	1	10340	391	1	10824	420
462398	1	1	5040	4.8	242	1955	1	5040	4.8	242						
465780	11	25	9255	4.5	417	1954	6	10125		479	1	7660	396	1	8317	4.5
						1955 1956	6	9190 8897	4.7	414	1	9500	486 511	1	9014 9559	456 463
						1957 1958 1959	5 2 1	9600 10090	5.0	400 472 432	2	8660 9320	437	2	8322	403 495
465977	1	1	3380	4.4	147	1959	1	3380		147	,	6560	242	1	8077	298
473221		1	7910		407	1959	· 1	7910		407	· 1	11160	496	1	10093	461
473934		4	6902		317	195ช	2	6400		288	2	7500	341	2	8894	396
						1959	2	8410	4.7	391	2	8240	376	Ž	8796	396
478506	14	21	7795	4.8	370	1954 1955	3	6080 6710	5.1	304 349						
						1956 1957	5	8358 8134	4.7	391 382	2		479	1 2	8589 9363	453
						1958	4	7840	4.9	38 4	2	9390	454	3	9755	456

6930 4.8 334

TABLE 15.--OAUGHTER-AYERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BELEU,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

DAOGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRL BY FRESHLNING YEAR SOS-LAY CONTEMP. AV. YEARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LB. LB. NO. LB. LB. YEARLY HERD AVERAGE RECORDS MILK FAT NO. LB. LB. FRESH RECORDS MILK TEST FAT SIRE OAUGHTERS KECORDS MILK TEST NO. NO. LB. PCT. FAT LB. NO. LB. PCT. JUERNSEY 8215 4.5 367 9599 LT4 4.5 303 6660 4.5 48 18 61 4.6 6284 362 4.5 4.5 4640 4.3 198 4.5 4.5 4.6 4.9 5.0 4.8 346 5 4.6 11467 395 4.7 7020 4.1 287 4.1 7460 311 4.6 5.1 5120 4.3 222 4.3 ı 4.4 4.4 9/10 5.2 5.2 4.9 4.9 452 11053 526

6930 4.8 534

8796 375

8090 345

738851 1 1 11920 3.6 426

TA8

	0AUGHTEK	AVEKAGE	BY SIF	RE		R	ECORD AV	ERAGE E	3Y 51R	E bY	FRESHENING YEAR				
SIRE NO.	DAUGHTERS NO.	RECORUS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TcST PCT.	FAT L8.	305-DAY CONTE RECORDS MILE NO. LB:	FAT	YEARLY HE RECORUS NO.	MILK	
							HOLS	TEIN							
639681	1	3	10447	3.9	413	1949 1950 1951	1 1 1	9840 10360 11140	3.8 4.1 3.9	378 424 437					
68 00 74	1	1	7800	3.5	275	1948	1	7800	3.5	215					
683509	1	4	10708	4.0	428	1949 1950 1952 1954	1 1 1	10160 10480 11190 11000	4.1 4.1 3.8	407 43∠ 454 420					
695644	2	6	11045	3.6	389	1949 1950 1951 1954	2 2 1 1	11130 9430 11530 13620	3.6 3.6 3.6 3.1	395 352 413 423					
697696	1	3	9303	3.4	321	1947	3	9303	3.4	321					
702224	2	12	14732	3.7	543	1948 1949 1950 1951 1952 1953 1954	2 2 2 2 1 1 1	12285 14870 14805 16155 15870 15090 14410 17760	3.7 3.7 3.7 3.7 3.6 3.7 3.6	447 547 538 593 582 548 533 645					
704766	1	4	9195	٥٠6	325	1951 1952 1963 1954	1 1 1	8050 8980 10750 9000	4.0 3.1 3.5 3.6	321 276 377 323					
705101	1	3	9950	3.9	388	1950 1951 1953	 	9270 10290 10290	3.9 4.0 3.8	364 413 388					
712122	4	15	10388	3.6	373	1947 1948 1949 1950 1951 1952 1953	1 1 3 3 3 1 2	11190 12020 9467 10020 9597 9260 12615 6690	3.4	411 431 343 353 339 312 460 235					
715429	1	2	9605	3.7	35 1	1948 1949	1	8480 10730	3.6 3.7	307 394					
715812	1	2	8720	3.6	310	1949 1950	i 1	9590 7850		357 263					
124277	1	1	14270	3.0	434	1948	1	14270	3.0	434					
727609	5	16	10964	3.7	407	1947 1948 1949 1950 1951 1952 1953	2 3 4 2 1 1 1 2	12105 10210 9598 11620 14950 11520 12960	3.8 3.9 3.7 4.2 3.6 4.4	464 398 575 426 634 420 565 389					
730516	91	172	10351	3.7	384	1951 1952 1953 1954 1955 1956 1957 1958 1959	6 19 20 30 32 20 16 9	9602 10396 9900 10939 10457 11017 12597	3.8 3.7 3.7 3.7 3.7	353 348 392 369 404 324 406 444 488	1 1221 1 1265 1 1127 2 1172 1 1153 5 1281	0 462 0 494 0 436 5 450 0 435 6 482	2 1 2 2 4 7	11135 12252 11500 11609 11682 12543	43 44 44
734441	14	33	9205	3.7	341	1947 1948 1949 1950 1951 1952 1953	15 4 5 3 1 2 2 1	9675 9115 8126 10313 9120 12695 11550 12280	3.8 3.7 3.8 3.7 3.4 3.6	362 341 292 381 338 429 419					
737915	8	21	10859	4.0	426	1948 1950 1951 1952 1953 1954 1955	1 6 4 2 1 2 3 2	11670 10538 11540 11170 13780 11800 11930	4.0 4.0 4.0	495 419 460 439 468 473 448					
				_	b. = 1				7	1 .					

1950 1 11920 3.6 426

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING GRGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

68

DAUGHTER AVERAGE BY SIRE

SIRE DA	AUGHTERS ND.	RECUROS NO.		TEST PCT.	FAT LB.	FRE5H YEAR	NO -	L8.	TEST PCT.	FAT LB.	305-DAY (RECURDS NO.	CONTLMP MILK LB.	FAT	YLAKLY HE RECOROS NO.		FAT
741370	1	2	9870	3.2	315	1950	H0L5	9440	3.2	303						
741493	2	3	11620	3.8	433	1951 1948	2	10300	3.2	326 397						
741493						1949	1	12890	3.9	506						
743063	2	5	9904	3.9	384	1949 1950 1951	1 3 1	9083 9710	4.0 3.8 3.4	441 353 327						
747242	4	14	13413	3.3	433	1950 1951 1952 1953 1954 1955 1956	1 1 3 3 2 1 2	10290 19970 15990 15113 13743 11865 13890 13395	3.7 3.0 3.2 3.2 3.2 3.1 3.1	378 597 509 489 436 364 429 403						
748046	2	2	15405	4.0	619	1949 1956	1	14380 16430	4.2 3.8	607 630						
750258	13	26	10 165	3.7	372	1950 1951 1952 1953 1954 1955	1 8 8 6 1	12840 9204 10964 9493 8460 11540	3.0 3.7 3.7 3.7 3.8 3.5 3.5	384 333 400 353 320 406 564						
750275	3	4	8947	3.8	336	1953 1954 1957 1959	1 1 1	5470 9910 11850 10490	3.9 3.5 3.5 4.0	212 350 413 415	ı	12070	447	1	1 1500	445
753496	9	31	11053	3.5	381	1949 1950 1951 1952 1953 1954 1955 1956	2 6 4 6 2 2 3 3 3	9305 10863 11443 11245 12980 10760 13617 14213 12350	3.4 3.5 3.6 3.4 3.5 3.4 3.2 3.2	313 379 409 384 454 357 441 457 388	1	13770	488			
755101	8	23	11373	3.5	398	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 5 5 4 3 1 1 1 1	9050 11370 11196 11245 11160 15540 18700 15290 16170 9960	3.8 3.5 3.6 3.5 3.5 3.1 3.3 3.7 3.8 3.1	342 398 397 388 382 483 623 564 615 306	1	9750	372	1	10213	369
758327	1	3	12670	3.6	460	1949 1951 1952	1 1 1	12380 11920 13710	3.7 3.5 3.7	455 419 505						
758846	16	57	12132	3.9	470	1951 1952 1953 1954 1955 1956 1957	8 12 11 5 8 6 5 2	11928 11396 12081 11548 13721 14123 13438 14135	4.0 4.0 3.8 4.0 4.0 4.0	471 451 484 443 548 562 537 489						
759193	1	2	14 360	3.5	500	1956	2	14360	3.5	500	1	12970	441	1	13429	468
760621	1	1	13040	3.5	452	1948	1	13040	3.5	452						
761977	54	90	11632	3.7	426	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 6 11 13 13 16 10 7 5	11265 11836 12147 11624 11757 11904 10508 12357 12410 11766 12160	3.8 3.5 3.6 3.7 3.7 3.5 3.7 3.6 3.7	428 417 442 429 432 420 387 447 439 502	1 2	16020 12020	657 459	1 2	13832 13108	555 485
764632	19	68	9824	3.9	384	1947 1948 1949 1950 1951 1952 1953 1954	12 13 8 10 9 6 7	10757 9202 7284 9928 10768 9420 11924 10100 9460	4.0 3.9 3.8 3.9 3.9 3.9 4.0 4.0 3.3	431 356 356 382 419 370 477 405 309						

TABLE 15.--DAUGHTER-AVERAGE OF SINES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATL UNLY

	DAOGHTER				IKUS FK		STATE UN		3Y 51R	E BY	FRESHENING	YEAR				
	DAGGINER	ATEMAGE	5. 31.			,	LUOND AV		,, 311				. AV.	YEARLY H	RD AVE	RAGE
SIRE L	NO.	RECOROS NO.		PCT.		FRESH YLAK	NO.	LB.	TEST PCT.		RECORDS NO.	MIEK L8.		RECOROS NO.		FB.
						1957	HOLS	1467G	3.1	455						
766065	16	47	11115	3.5	384	1948 1949 1950 1951 1952 1953 1954 1955	7 8	11427	3.7 3.2 3.6 3.4 3.7 3.6 3.4 3.2	344 308 329 422 390 406 354 372 326						
768460	3	9	10114	3.5	355	1950 1951 1952 1953 1954 1955	1 1 2 2 2 2	13730 10330 5970 9105 8245 9480	3.6 3.4 3.5 3.5 3.4	494 356 200 320 278 331						
769170	1	1	14880	4.1	608	1959	1	14880	4 - 1	608	1	17520	662	1	16623	64 /
77 lo 02	7	20	10258	3.8	383	1951 1952 1953 1954 1955 1956		10459 11680 10406 9810 13315 11770		405 414 380 351 438 357						
772380	32	92	11186	3.7	412	1951 1952 1953 1954 1955 1956 1957 1958 1959	8 21 17 13 13 10 4 5	9405 11382 11352 11139 10618 12244 11013 12988 14520	3.7 3.7 3.7 3.9 3.8 3.8 3.6 3.5	345 422 424 410 411 470 414 472 511	ı	13190	459	1	12491	450
774532	1	2	11650	3.8	443	1952 1953	1	13200	3.9	513 372						
775869	11	30	11195	3.6	401	1951 1952 1953 1954 1955 1956 1958 1959	5	10638 10910 9398 11114 8900 13255 14226	3.5 3.7 3.7	371 406 343 411 307 445 385 737	1 1 1 1 1	10200 9400 7910 8900 10040 13070	387 362 303 312 357 529	;	9701 14704	
776442	1	1	7260	3 • 3	242	1951	1	7260	3.3	242						
776883	1	1	9820	3.9	386	1954	1	9820	3.9	386						
77 (1 ((18	37	10960	3.8	406	1949 1950 1951 1952 1953 1954 1955		8503 10000 10602 11891 10102 13305 12883 14050	4.0 3.8 3.7 3.6 3.7 3.4 3.6 3.9	337 369 408 426 372 460 457 543						
778171	7	31	10802	3.9	414	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	2 3 1 1 1	10644	3.7 3.8 3.9 3.7 3.5 3.6 3.6	455 404						
778322	1	1	8540	3.7	321	1948	1	8590	3 • 7	32 I						
780456	62	132	10293	5.6	372	1951 1952 1953 1954 1955 1956 1957 1958 1960	12 18 23 27 21 16	10888 10891 10626 11462 10202 11111 10965 9953 14350	3.5 3.5 3.6 3.6 3.7 3.5 3.5	397 386 377 416 384 406 381 344 470	1 1 2	12340 11010 13260 9745 10350	431 457 390		12186 12252 12284 10841 9647	465 486 443
783017	2	5	12046	3.5	420	1951 1952		12185 11890		429 412						

TABLE 15.--OAUGHTLR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

	OAUGHTER	AVLRAGE	BY 511	H E		К	ECURD AV	ERAGE 8	SY SIR	E 8Y	FRESHENING	YEAR				
51RE NO.	UAUGHTERS NO.	RECOROS		TEST PCT.		FRESH YEAR	KECURDS NO.		TEST PCT.				FAT		MILK	
						1953	HOLS	TEIN 12230	3.6	445						
18423	1 8	25	11022	3.8	420	1949 1950 1951 1952 1953 1954 1955	8 4 4	8630 10443 11165 11135 11603 11340 13980 11980	3.9 3.8 4.0 3.8 3.7 4.1	312 399 429 439 440 421 570						
78477	9 2	14	14368	3.7	526	1751 1952 1954	2 1 1	13965 13580 15960		520 552 512						
78535	9 1	1	10710	4.0	427	1948	1	10710	4.0	427						
78752.	3 9	21	12735	3.7	464	1949 1950 1951 1952 1953 1954 1955 1956	1 1 3 6	10060 11890 9610 12480 12800 12365 14600 12850 14970	3.4 4.0 3.5 3.7 3.6 4.3 3.3	386 433 468 444						
78839	9 20	42	10932	3.5	380	1950 1951 1952 1953 1954 1955 1956	9	10046 10780 9738 11940 11670 12255 13780 10910	3.5 3.6 3.4 3.4 3.5 3.5	337 374 347 413 396 427 457 404						
79010	6 46	106	10487	3.7	383	1951 1952 1953 1954 1955 1956 1957	10 16 21 17 20 14 4 2	10409 10549 11604 10353 10619 10416 13875	3.8 3.7 3.6 3.6 3.6 3.6	389 403 429 380 378 376 482 451	ı	9210	325	1	10159	355
7923 l	8 11	27	9924	3.9	385	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5	7555 9753 10910	3.9 3.7 3.9 3.4 3.8 5.5	222 277 401 420 593 386 508 575 454 411 459	1 1 1 1 1 2		351 304 370 429 490 411	1 1 1 1 1 2	13015	426
79430	9 2	13	11461	3.8	429	1947 1948 1949 1950 1951 1952 1953 1954		11725 11710 15140 10575 9885 11385 11030 11260 11360	3.9 3.6 3.7 4.0 3.8 3.8 3.7	446 461 551 389 391 424 420 414						
79845	1 22	52	10295	3.7	378	1949 1950 1951 1952 1953 1954 1955 1956	5 6 11 11 6 5 3 4	10866 9582 10426 10377 9565 10752 11447 11020 13250	3.6 3.9 3.7 3.8 3.8 3.6 3.6	386 343 399 369 363 408 413 374						
79906	1 2	8	10033	3.3	329	1951 1952 1953 1954 1955	2 1 2 2 1	10335 9890	3.4	338 313 343 313 329						
19919	9 8	11	11149	4.0	446	1958 1959 1960	4 5 2	9665 12260 12025	4.1	377 506 435	4 5 2	10003 12294 11870		4 5 2	9878 11789 11347	445
79987	5 137	259	11648	3.6	416	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 3 12 21 27 44 36 56 52 29	13510 14203 11173 11873 110520 12100 12739 11698 12172	3.4 3.6 3.6 3.5 3.6 3.5	391 409 428 457 414		9510 11350 11977 11937 11615 11106 11647	401 413 429 459 423	1 2 6 9 18 14 23	9069 10230 10666 11271 10180 11097 11875	367 389 417 414 424

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY DREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

	0A0GHTER				NUS FK		ECURD AV		BY SIR	E BY	FKESHENING	YEAR				
											305-DAY 6	ONTEMP		YEARLY HE		
SIRE NO.	NO.	NO.	MILK LB.	PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		PCT.		RECURUS NO.		FAT L8.	RECURUS NO.	MILK LB.	
						1960	HOLS 4	TE IN 11788	4.0	453	4	11623	443	3	12419	482
80 00 00	1	2	5780	3.6	208	1949 1950	, l	5860 5700		207 208						
801375	,	23	9822	3.6	360	1949 1950 1951 1952 1953 1954 1955	1 1 3 5 6 3 3	6370 6830 11700 11040 10073 10800 12000 7660	3.5 3.8 3.7 4.0 3.9	257 230 411 413 378 431 471 276						
802505	1	1	10600	3.7	391	1948	1	10600	3.7	391						
808678	6	13	11965	3.7	429	1950 1951 1952 1953 1954 1955 1956 1958	2 3 1 2 2 1 1	10495 9733 12970 14400 12465 11530 11010 14170	3.9 3.5 3.3 3.4 3.1	394 384 448 475 417 361 353 475	1	11390	408	1	10889	388
B08916	6	17	13057	3-4	445	1950 1951 1952 1953 1955 1956	3 3 3 2 1	11633 12160 10080 12757 12945 13570 13890	3.2 3.3 3.3 3.6 3.9	403 394 360 431 459 525 516						
810427	7	20	9624	3.8	368	1950 1951 1952 1953 1954 1955	5 4 2 2 3 2 2	9068 9900 12065 10315 10913 9535 9720		358 357 456 392 405 380 352						
815143	100	14 1	11296	3.9	442	1954 1955 1956 1957 1958 1959	2 14 25 36 30 32 2	10490 10996 11182 10950 11975 11825 13675	3.8 3.8 4.0	392 416 428 437 465 458 564		12540 12434 12190 11389 10905	529 465 471 432 402	2 2 11 18 32 2	14606 1245? 10758 12617 11904 11592	557 488 448 477 449 434
815236	19	40	10850	3.7	399	1948 1949 1950 1951 1952 1953 1954 1955 1956	9 11 8 3 3 2 1 1	12580 10973 10870 11473 13840 12647 9060 6480 11610	3.7 3.6 3.6 3.8 3.7 3.9 3.5	450 410 397 412 503 482 330 253 407 411	ı	11330	433			
817044	1	- 1	13090	3.6	470	1949	1	13090	3.6	470						
820752	6	14	11545	3.6	414	1948 1950 1951 1952 1954 1955 1956 1957 1958 1959	1 2 2 2 1 2 1 1 1		3.5 3.7 3.9 3.7 3.5 3.5 3.2 4.0	410 392 436 462 440 423 324 313 414 301						
821505	1	3	12730	3.4	426	1956 1957 1958	1 1 1	10910 12950 14330	3.2	380 417 481		12240 12540		1 1 1	10715 8807 9189	379 314 366
822065	1	1	11340	4.3	د84	1955	1	11340	4.3	483						
822413	19	34	11443	3.6	410	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 4 3 2 5 3 6 2 2	11580 12148 12677 12325 8862 11578 10277 11745 14365 16040	3.6 3.5 3.5 3.6 3.5 3.5 3.6 3.8	432 439 447 434 313 399 359 423 348 569		12640 12030			13385 13511	
8267 10	. 4,	8	10342	3.9	402	1950 1951 1952 1953	1 3 2 2	11300 10103 9840 9850	3.8 3.4	408 385 386 398						

TABLE 15.--OAUGHTLR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

1959	15805 12404 15478	245 301
827226 1 2 10220 3.4 343 1951 1 9530 3.4 324 827743 2 8 9289 3.3 304 1952 1 8510 3.3 277 1953 1 1030 3.1 381 1954 1 12130 3.1 381 1955 1 10630 3.2 344 1 9210 340 1957 1 10070 3.3 328 1 8990 392 1 1957 1 10070 3.3 328 1 8990 392 1 1958 1 11420 3.4 390 1 9150 355 1 828522 14 46 10416 3.7 381 1951 4 12278 3.4 421 1952 5 10966 3.5 387 1953 6 11453 3.5 398 1954 6 11962 3.5 422 1955 6 12330 3.4 420 1955 6 12330 3.4 420	15478 6671 7783	245 301
827743 2 8 9289 3.3 304 1952 1 8510 3.3 277 1953 2 9255 3.3 504 1954 1 12130 3.1 381 1955 1 10630 3.2 344 1 9210 340 1956 1 9670 3.3 328 1 8990 392 1 1957 1 10070 3.2 25 1 10800 406 1 1958 1 11420 3.4 390 1 9150 355 1 828522 14 46 10416 3.7 381 1951 4 12278 3.4 421 1952 5 10966 3.5 387 1954 6 11962 3.5 398 1954 6 11962 3.5 422 1955 6 12330 3.4 420 1956 3 11023 3.6 404	7783	301
1953 2 9255 3-3 304	7783	301
1952 5 10966 3.5 387 1953 6 11453 3.5 398 1954 6 11962 3.5 422 1955 6 12530 3.4 420 1956 3 11023 3.6 404		
1957 0 12063 3.5 4.10 1958 3 9330 3.9 361 1 11150 401 1 1959 5 9,890 3.8 352 5 10578 377 5 1960 2 13480 3.7 502 2 10190 383 2	9880	339 355 417
820f 58 6 23 10548 4.0 419 1950 2 9165 4.3 401 1951 3 9695 4.3 437 1952 4 9058 4.0 363 1953 3 11273 4.4 492 1954 3 11463 4.3 500 1 1955 1 10110 3.9 397 1 1956 3 12210 4.0 485 1 1957 2 12255 4.2 516 1	8829 10006	332 320 367
829220 15 33 11674 5.6 417 1952 3 11657 3.6 419 1953 5 9474 3.6 336 1954 5 11486 3.6 415 1955 5 11318 3.5 388 1956 7 12520 3.8 469 1957 4 11775 3.4 398	12405	438
1956 16 11768 3.6 429 1 11890 429 1 1957 10 12719 3.5 442 4 12725 454 3		412 420
830593 10 25 12686 3.5 443 1950 1 15080 3.4 508 1951 2 12595 3.6 453 1952 3 9983 3.7 368 1953 1 12680 3.7 469 1954 5 12232 3.4 417 1955 5 12962 3.4 449 1956 4 12125 3.5 423 1957 1 15050 3.7 554 1958 3 14003 3.4 476 1 14580 545 1	13135	446
831870 91 201 12032 3.6 425 1951 3 13867 3.5 488	11718 11009 11738 11889 11787 11364	477 444 438 452 446 409
632235 2 4 10415 3.9 407 1950 1 10810 4.1 444 1951 2 9990 3.8 383 1952 1 10870 3.0 417		
852/35 45 106 11096 3.8 420 1949 1 12780 3.5 450 1950 1 9310 3.0 339 1951 6 8628 4.0 344 1952 7 11009 4.1 444 1953 15 10577 3.8 396 1 14220 476 1954 25 10826 3.8 408 1 13530 472 1955 22 11523 3.6 444 1 12310 435 1956 11 11786 3.7 452 1957 10 12145 3.6 466 1 12650 464 1958 3 11533 3.9 439 2 11355 417 1	11707	412 519

TABLE 13.--GAUGHTER-AVERAGE OF SINES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	GAUSHTER	AVERAGE	BY 51	Ré		R	ELUKU AVI	ERAGL 6	Y SIR	E BY	rKESHENING	YLAK				
SIRE I	NO.	RECORUS		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.		SUS-DAY (RECORDS 40.		FAT	YEARLY HE RECORDS 140.		FAI
							HOLS	TEIN								
032154	2	6	8293	3.6	293	1950 1951 1952 1953	1 1 2 2	5650 6470 8465 8400	4.2 3.8 3.5 3.5	238 245 291 294						
634222	42	91	10:19	3.6	385	1951 1952 1953 1954 1955 1956 1957	5 10 15 20 19 14 7 3	12190 11666 11101 10876 11135 11225 11274 10767	3.8 3.5 3.6 3.4 3.7 3.5 3.5 3.4	453 411 579 374 404 594 400 502	1	11260	40 >	1	15417	4o.:
335421	lą.	6	13015	3.6	460	1954 1955 1956 1953 1959 1960	1 1 1 1	11760 12760 9766 13450 15940 14750	3.0	399 457 352 502 562 559	}	12640 12830		i I	13156 12219	477 473
630109	1	1	9500	3.6	33.	1952	1	9500	5.0	337						
o37025	112	174	11001	3.9	420	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	7 10 15 14 27 29 30 3	11476 10684 11215 10895 11435 10058 11700 11107 11107 11324 12113	3.6 3.8 3.8 3.8 3.0	453 400 423 414 434 301 463 475 441 444	ہ اہ اور ع	12767 12764 11576 11106	464 467 432 404		11/15 11/42 11844 11454	4.8 475 441 417
63 <i>1</i> 569	20	56	10000	٤.4	370	1950 1951 1952 1953 1954 1955 1956 1957 1958 1960		10360 11545 11386 10778 10848 11287 10607 13740 12230 12310	3.5	347 371 370 377 389 366 514 423 413	1	12150	490	†	√61½ 11162	340 349
842153	1	1	11610	3.5	41∠	1956	1	Holb	5.5	412						
844276	331	626	11221	3.8	423	1952 1953 1954 1955 1956 1957 1958 1959	8 40 102 135 130 112 52 30 11	10685 11084 10564 10981 11111 11192 12641 13136 14047	4.0 3.7 3.6 3.6 3.6 3.6 3.7 3.7	425 577 413 415 423 485 407	1 2 3 0 9 21 36 10	9930 11570 7773 14455 10750 12564 12270 13181	377 437 365 539 425 447 477 507	। • • • • • • • • • • • • • • • • • • •	869** 10069 12233 9333 12188 12551 12306	317 391 451 375 402 4 7
€ 464∠3	30	50	12349	5.7	457	1952 1954 1955 1956 1957 1958 1959	1 5 7 5 12 11 10	15780 13103 13389 11878 12638 12734 12785	3.0 3.0 3.4 3.7 3.7 3.7	377 470 463 410 473 460 479	6 9	1405K 12510 11777	517 461 455	ż 6 9	13307 1157° 12724	304 472 456
840738		6	10814	3.د	355	1955 1954 1955 1956	1 2 4 1	12110 10640 11113 12160	3.3 3.3	369 346 366 376						
846979	3	3	11033	3.8	416	1956 1959	2	11480 10140		425 399		12945			11566 12431	
847579	112	203	10855	3.8	411	1952 1953 1954 1955 1956 1957 1958 1959	15 19 25 31 38 27 20 17 5	11739 10582 10327 10809 10575 11473 11414 10343 10683	3.7 3.0 3.6 3.6 3.7 3.7	456 398 391 417 464 482 482 482 484 484 484	1 1 9 13 14	14150 - 2670 12467 13712 11577 11450	4/0 320 450 506 41/	5 13 14	9411 12954 11715 11440	ц., 46э 4. С
o53/1/	>	1	ø3a I	3.7	312	1952 1953 1955	4 2 1	9170 8210 12560	3.1	350 323 517						
854210	ц	7	14515	3.6	518	1955 1957 1958 1959 1960	1	12620 11730 14953 13310 16990	3.6 3.0 3.5	451 427 539 472 588	1	12350	410	1	13131 12481 12437	4.,7
اد 3د خ 6	δ	17	92.5	3.6	327	1950	1	674 u	s. (247						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPLD BY BRLEO.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE GNLY

DAUGHTER AVERAGE BY SIRE

RECORD AVERAGE BY STEE BY FALSHENING YLAK

STRE NO.	DAUGHTERS NO.	RELOROS NO.	MILK LB-	TLST PCT.	FAT LB.	FRESH YEAR	KCCUKUS NO.		TEST PCT.	FAT LB.	305-DAY (RECURDS		FAT	YEARLY HE RECORDS NO.		FAT
						1951 1952 1953 1954 1955 1956	HOES 1 1 5 4 4 2 1	TEIN 15730 4290 9323 8955 10233 11575 8360	3.6 3.9 3.7 3.5 3.5 3.4 3.4	567 168 339 309 352 387 286						
858418	67	132	11606	3.7	42v	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 16 13 15 19 18 13 15 14	9947 10890 11534 12286 11239 11561 11304 12191 12675 12989 13280		352 406 426 450 397 414 413 429 451 474	1 2 9 14 1	10360 12485 12664 12848 13080	405 456 466 462 471	1 2 6 14 1	9995 10639 12450 13198 13015	349 377 441 479 482
859216	2	3	11180	3.8	424	1951 1952 1956	1 1 1	10280 14260 10090	4.∠ 3.9 3.5	431 560 351						
860003	3 2	5	12645	3.6	454	1950 1951 1952 1954	1 1 1 2	13880 12060 13480 12930	3.3 3.5 3.4 3.5	460 419 462 455						
862248	23	47	12134	3.6	43 8	1952 1953 1954 1955 1956 1957 1958 1959	3 4 10 11 12 4 2	11127 11538 11310 12197 13078 14028 13590 12410	3.6 3.7 3.7 3.5 3.7 3.5 3.7	404 422 407 431 476 486 498 428						
863756	, ų	8	10641	3.8	397	1957 1958 1959	4 2 2	10133 10325 11660	3.8 3.8 3.9	386 390 446	3 1 2	10580 11640 12085	377 403 423	3 1 2	10762 11053 11767	408 407 428
865323	3	3	14230	3.B	5 39	1958 1959 1960	1	16230 12570 13890	3.3 4.1 4.0	544 513 561	1 1 1	13730 12970 12600	491 486 483	}	13712 13363	502 500
865325	5 1	1	6000	3.8	2.30	1959	1	6000	3.6	230	1	6320	232	1	7990	294
866635	17	38	10598	3.8	404	1953 1954 1955 1956 1957 1958 1959	11 9 4 7 2	10668 11046 11033 10705 10819 12285 8490		405 422 430 435 424 517 285	1 1	129 10 13390 12250	479 481 521	1 1 1	13145 13047 13069 10900	510 511 510 389
867412	2 184	350	11035	4.0	435	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 11 19 23 40 55 62 67 39 26	12790 10332 10184 11492 10946 10406 10610 11765 12275 12459 11690	3.9 3.9 3.9	531 408 394 464 422 406 416 466 490 499 480	1 2 6 7 15 25 5	13640 12365 10107 12996 12273 13000 11582	529 458 407 485 472 501 452	1 2 7 10 15 25	14726 11832 10078 11140 11848 13352 12075	567 464 401 432 456 508 450
867643	3 24	47	10256	3.7	370	1952 1953 1954 1955 1956 1957 1958 1959	6 6 6 5 5 2 2	9284 10308 9585 10420 9783 11100 12858 13660 11450	3.7 3.5 3.6 3.7	357 380 351 379 345 397 473 508 414	2 2	11970 15240 12510 10555	378 534 466 398	1 2 2 2 2	11456 11609 13053 12824	413 430 491 482
870458	3 1	4	11873	4.0	469	1951 1953 1954 1955	1 1 1 1	11040 12960 10860 12630		432 487 450 506						
875201	2	ý	12825	3-8	474	1954 1955 1956 1957 1958 1959	1 2 2 1 2	13120 12315 13800 11690 13165 10710	3.5 3.9 3.8 3.9 3.7	464 477 521 454 468 403						
880178	3 1	2	8500	3.4	285	1953 1954	1	7040 9960	3.5 3.3	244 325						
880188	3 38	80	10720	3.7	395	1952		11125			1	12170	420			

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE I	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	KcCOROS NO.		TEST PCT.		305-0AY RECUROS NO.			YEARLY HI RECORUS NO.	MILK	
						1953 1954 1955 1956 1957 1958 1959	HOLS 18 21 15 8 7 4 4	TEIN 10781 10980 12078 11238 13494 14615 11683 8550	3.6 3.7 3.8 4.0 4.1 3.9 3.3	410 405 465 446 549 564 385 280	1 2 2 2 1 1 2 4	14760	604 599 524 542 478 550 448 433	2	13434 14105 12486 11652 12404 13598 12023	504 543 461 416 432 522 463
881784	8	13	11959	3.6	424	1953 1954 1955 1956 1957 1958 1959	2 1 1 2 2 2 2 2	10485 6350 10450 9905 10325 15210 14310 10930	3.8 3.8 3.8	463 260 396 374 384 462 466 375	1 2 1	13420 13340 11200	495 501 398	2 1	13364 11042	
883725	12	27	10810	3.4	368	1952 1953 1954 1955 1956 1957 1958 1959	1 5 6 6 1 1	13600 10274 11038 10312 9195 10330 11000 12280	3.4 3.2 3.1	456 379 368 368 307 326 337 399	1	11500	410	1	11478	403
88428 5	6	13	11176	3.7	421	1953 1954 1955 1956 1957 1958	3 3 2 3 1 1		3.7 3.6 3.6 3.5 3.8 4.1	405 441 386 327 512 471	1	13390	467	1	13603	կեւկ
884838	58	128	10993	3.9	428	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 1 3 7 30 30 22 14 10 6 2 2	15980 9330 10437 11740 10455 10702 10866 10394 13022 14813 13475 15295	4.0 3.9 3.9 4.0	542 337 410 453 411 416 429 407 485 554 515 591		12260	444 469 542 488 465 543 550 473 551	1 2	12077 12317 10868 13685 11997 12691 13026 13930	
888602	8	15	10727	3.7	396	1953 1954 1955 1956 1957 1958 1959	2 14 3 3 1 1	12235 9443 11257 11870 13450 9500 12020	3.5 3.7 3.7 3.6 3.5 3.1	423 348 409 421 470 350 476	1 1 1		447 447 565 434	2 1 1 1	10551 11260 10693 15456 12797	388 409 333 591 464
889181	270	386	11511	4.0	458	1954 1955 1956 1957 1958 1959 1960	7 38 70 87 71 99	9533 10322 10617 11386 11728 12509 10554	3.8 4.0 3.9 4.0 4.0 4.0	363 411 412 450 472 500 415	2 8 10 35 95	12744 12109	513 480 452 468 500 422	2 6 9 35 92 12	9805 10657 10649 12303 13093 12037	386 403 407 477 505 466
889312	48	74	10168	3.7	368	1952 1953 1954 1955 1956 1957 1958	2 7 16 14 23 9 3	11535 11330 10114 10204 10497 10981 11160	3.7 3.7 3.8 3.5 3.6 3.6	420 415 376 355 375 399 404		12890 11987 12775	432	2	12045 11058 13789	
89 16 36	46	90	11198	3.6	402	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 6 10 19 16 16 12 6 3	11040 11962 11039 10889 11331 11698 12572 13110 11697	3.6 3.6 3.6 3.6	402 432 409 385 407 415 437 451 401	2 1 5 3	12280 11800 12066 13437 12057	394 389 428 479 437		10083 13291 12441	
893638	2	В	11237	3.7	408	1949 1950 1952 1953 1954 1955 1956	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11540 12226 13980 11590 9000 10890 12300 9990	3.3 3.5 3.6 3.2 4.1 3.2 3.8	382 423 499 375 371 346	,	12031	431	3	12441	4.7
897/89	2	6	9713	3.6	342	1952 1953 1954 1955 1956	1 2 1 1	12260 9125 11490 11470 11420	3.5 3.6 3.6 3.4	433 321 412 395 386						

TABLE 13.---UAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

BAUGHTER AVERAGE BY SIRE

SIRE UAUGHTERS RECORDS NO. NO. NO.	MILK ILST LB. PCT.	FAT FRESH LB. YEAK		K TEST FAT . PCT. Lb.	305-DAY CONTEMS RECURDS MILK NO. LE.		MILK FAT
			HOLSTEIN				
897932 1 5	8506 3.7	321 1951 1952 1953 1954 1955	1 972 1 816 1 942 1 825 1 723	0 3.9 365 0 3.8 311			
900274 1 1	9530 4.2	404 1959	1 953	0 4.2 404	1 10500	396 1	10726 388
901445 58 110	11258 3.7	409 1949 1950 1951 1952 1953 1954 1955	3 1169 4 1251 8 1041 9 1167 12 1157		1 11540	1 400 1	13779 521 13734 504
		1956 1957 1958 1959 1960	16 1141 23 1151 13 1196 7 1237 2 1390	1 3.6 413 9 3.7 421 5 3.0 427 1 3.4 426 0 3.6 528	2 14o25 9 12710	530 3 460 8 455 8 458 7	12/86 454 10201 417 12090 431 11/22 447
902500 1 3	13477 3.6	478 1956 1958 1959	1 1346 1 1375 1 1322	0 3.6 442			
902501 9 19	11117 3.6	398 1953 1954 1955 1956 1957 1958 1959	3 1081 6 1053	2 3.5 405 7 3.9 417 5 3.5 304 0 3.5 463 5 3.6 433	1 14370 1 13610		13899 501
902715 49 80	10731 3.8	402 1953 1954	2 1111 12 989	5 3.7 400 0 3.7 368	1 13010	404	1304: 301
		1955 1956 1957 1958 1959 1960	15 975 12 1148 11 1219 3 1214	5 3.6 3/9 0 3.7 354 6 3.7 424 4 3.8 464 0 3.5 430 5 3.9 4/7	5 12800	430 3 488 3 461 3	11587 426 11289 461 12346 456 13476 406 12890 472
90355 7 16 26	11515 3.4	393 1954 1955 1956 1957 1958 1959	5 963 6 1008	8 3.4 441 0 3.3 482	1 13010 1 9600 7 11973	579	9614 383 12423 458
V04891 28 57	10827 3.6	387 1953 1954 1955 1956 1957 1958 1959	1 1206 10 937 10 1128 12 1077 10 1154 6 1232 2 1642	5 3.6 409 4 3.6 386 4 3.5 407 5 3.5 432	1 12200 2 13510	412 1 445 1 486 1 501 2	
905683 42 55	11393 3.8	429 1955 1956 1957 1958 1959 1960	7 1040 o 1085 8 1072 11 1250 19 1159 2 805	5 3.7 401 1 3.9 415 7 3.7 407 1 3.7 434	5 10586 ฮ 12343	459 7 450 19	10050 368 8004 371 11737 4.5 12668 461 12186 448
900000 1 2	16085 3.5	560 1959 1960	I 1740 I 1477			1	13832 499
908515 6 34	13691 3.6	496 1948 1949 1950 1951 1952 1953 1954 1955 1956	4 1077 6 1024 5 1368 4 1495 4 1424 3 1713 2 1619 2 1733 3 2002 1 1759	2 3.0 488 3 3.7 546 3 3.7 520 0 3.8 657 0 3.6 583 5 4.2 716 7 3.6 741			
909229 2 2	15225 3.7	558 1958 1959	1 1817 1 1228	0 3.7 079 0 3.6 457	1 14700 1 13360		13547 504
910774 4 4	12305 3.7	458 1955 1959	1 1131 3 1263		3 12817	480 3	12/64 4/9
913986 1 4	15948 3.7	592 1955 1957 1958 1959	1 1664 1 1697 1 1644 1 1374	0 3.7 622	1 17570	649 1	1c383 617

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8Y SI	₹L		R	ECORO AV	ERAGE 8	BY SIR	£ 8Y	FRESHENING	YEAK				
SIKE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RLCOROS NO.		TEST PCT.		305-0AY (RECORDS NO.		FAT	YLARLY HE RECORDS NO.		FAT
							HOLS	TEIN								
914858	1	1	14610	3.6	525	1956	1	14610	3.6	525						
918977	rt.	10	9228	3.6	328	1951 1952 1953 1954 1955 1957 1958	1 3 2 1 1	9570 9570 9970 9170 10540 9400 9090	3.4 3.6 3.4 3.5 3.4 3.3	385 341 355 310 374 322 302						
920562	77	131	10687	3.8	408	1953 1954 1955 1956 1957 1958 1959	1 20 30 36 24 7 12	12700 10024 10870 10814 11425 12219 11611 11900	3.7 3.9 3.8 3.9 4.0 3.8 4.1	467 369 419 412 444 488 446 487	1 1 2 10	15750 15210 12365 11715 9780	547 528 460 454 385		11053 12424	
920871	46	100	101:0	3.8	384	1953 1954 1955 1956 1957 1958 1959	2 12 29 25 21 9 2	9715 10235 9859 10380 10739 11862 12070	3.9 3.8 3.9 3.7 3.7 3.8 3.3	380 389 380 400 399 449 394	1 2 3 3 3	8240 11565 10997 12080 11920	328 432 389 444 434	4 3 5 3 2	10102 9472 9322 11027 11342	30 9 33 9 34 0 40 8 43 6
921170	1	ų	12253	3.6	438	1955 1956 1957 1958	1 1 1 1	11210 13350 12140 12310	3.6 3.5 3.4	406 502 425 418						
921858	1	4	10243	3.4	351	1954 1955 1956 1957	1 1 1 1	9540 11000 10090 10340	3.5 3.5 3.3 3.4	332 386 330 355						
922288	6	10	13825	3.7	507	1955 1756 1957 1959	1 4 4 1	11040 14773 14680 9330	3.8 3.0 3.0 4.3	418 538 52∠ 403	1	11400	470	1	9167	403
92 53 14	293	488	11802	3.7	437	1953 1954 1955 1956 1957 1958 1959	11 43 78 97 100 79 69	11521 11203 11274 11840 12162 12369 12039 12456	3.9 3.7 3.8 3.7 3.7 3.7 3.7	444 416 423 442 452 458 443 459	4 6 25 52 68 5	11578 11877 11148 11201 11382 11426	410 425 426 424 433 432	4 8 26 47 67	11598 11260 11148 11355 11813 11966	426 418 445 428 451 457
924564	75	155	11550	3.6	419	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1956 1959 1960	1 2 1 2 2 10 20 23 30 26 15	10250 11405 11320 12775 9920 11116 11395 11426 11661 11961 12957 12191 12532	3.8 3.7 3.3 3.5 3.7 3.6 3.6 3.7 3.7	302 428 422 411 343 405 411 415 421 446 455 428	1 2 2 9 10 7	13460 11675 12915 11564 13364 12704 13248	50 3 46 1 46 9 43 5 49 4 45 3 46 7	2 2 5 6 9 6 5	11958 10747 11639 11480 12905 13017 12827	451 403 428 415 474 475 467
926101	6	13	10852	3.4	361	1950 1951 1952 1953 1954 1955	1 2 3 3 2 2	13350 10485 10317 10410 12205 12295	3.6 3.4 3.3 3.2	384 372 347 333 386 349						
926102	14	В	10693	3.8	402	1949 1951 1952 1954 1955 1957	1 1 1 2 1	13940 12860 9710 10996 10135 11240 11850	3.6 3.6 3.9 4.1	502 468 366 397 403 460 462						
928378	2	3	15113	3.9	583	1958 1959	2	15135 13310	3.9	579 531	ı	12/80	499	1	13789	530
929462	63	116	12291	3.6	ե գ եչ եչ	1953 1954 1955 1956 1957 1958 1959 1960	6 9 12 23 20 23 8	11392 12434 12524 12813 11890 12140 12521 13515	3.6 3.5 3.6 3.7 3.6	419 455 449 449 429 443 451 476	1 9 17 20 6	9830 11904 12407 11855 12338	371 422 456 439 440	1 1 4 15 20 4	10747 10758 10862 12223 12134 12663	403 412 402 445 446
936716	. 24	42	10174	3.5	353	1950 1951 1952 1953 1954 1955	7 7 9 7 5 2	8546 9963 9682 12050 10484 13635	3.6 3.4 3.6	316 341 351 414 377 511						

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NU.	DAUGHTERS NO.	RLCORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		305-DAY RECUROS NO.		FAT	YEARLY H RECORDS NO.		FAT
						1956 1957 1958 1960	HOLS 1 2 1 1	TE1N 12440 13225 12390 11030	3.8	468 427 470 354				1	14028	509
93803	4 24	31	11086	3.6	401	1955 1956 1957 1958 1959 1960	2 4 6 5 13	10600 10438 11865 13312 10792 10540	3.4 3.6 3.5 3.7 3.7 3.8	356 371 417 487 392 396	1 1 4 13	12730 13630 13055 12831 13900	441 461 493 476 514	1 1 4 12	11260 10693 12135 13153	409 383 451 484
93808	2 12	14	10735	3.7	400	1951 1952 1957 1958 1959	1 1 3 4 5	8810 7650 9393 11115 12520	3.5 3.6 3.9 3.6 3.7	306 274 371 393 460	2 3 5	12515 12880 12004	436 476 457	2 3 5	11821 11968 12661	416 419 480
93824	2 1	1	8740	3.8	332	1956	1	8740	3.8	332						
94042	4 7	12	12530	3.6	450	1954 1955 1956 1957 1958 1959	1 4 2 1 3 1	10560 11883 9400 11520 14947 16040		418 419 331 436 544 546	2 1 1 3 1	15080 12200 13770 13580 13860	523 443 496 488 504	1 1 1 3 1	10649 10802 11609 13385 13734	380 380 413 481 511
94178	0 83	163	11306	3.6	407	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 9 13 10 11 15 28 29 22 15 7	10467 9816 10239 11516 11215 10308 11824 11827 12327 12656 12423 14430	3.6 3.7 3.6 3.5	381 347 373 417 419 371 429 410 438 446 440 533	1 1 1 5 6 5	11/30 12210 12880 14040 11960 13228 11718 13030	463 491 499 546 436 492 431 468	1 1 1 1 6 6 5	10093 13701 13723 10562 12368 13158 12936 13015	368 498 512 424 446 492 478 482
94202	9 26	34	10743	4.0	420	1956 1957 1958 1959	2 12 15 5	10960 10968 11041 9962		447 437 422 372	5 8 5	12446 11546 10922	461 417 416	4 7 5	11124 11691 11240	419 428 422
94346	2 45	55	11118	3.7	409	1957 1958 1959 1960	1 21 30 3	8470 11473 10878 10660	3.3 3.8 3.7 3.6	277 430 399 379	1 18 30 2	12790 10972 10931 9070	432 439 420 335	1 17 28 3	13451 11053 11184 11525	453 441 423 409
94913	9 2	3	13913	3.7	503	1958 1959 1960	1 1 1	12790 13720 15420	3.5 3.6 3.8	446 492 579	1	12600	482	1 1 1	13156 13309 12437	504 497 472
94915	9 3	Ĭţ.	12080	3.9	470	1957 1958 1959	1 1 2	14420 12320 10245	4.2 3.8 3.9	610 473 389	1 2	14040 11675	521 465	1 2	12524 11304	460 456
95070		1	16070	3.6	572	1959	1	16070	3.6	572						
95202	9 2	2	15700	3.5	538	1959 1960	1	15810 15590		518 558	1	12540 13270	472 511	1	12481	409
95242	1 44	56	11162	3.8	416	1955 1956 1957 1958 1959 1960	2 9 16 21 7	10855 11373 10823 11358 11971 14110	3.8 3.7 3.7	398 431 403 415 450 534	2 / 11 7 1	12365 12020 12815 11731 13660	459 448 463 435 505	2 7 11 7	11424 10998 11886 12641	437 426 427 463
95464	5 2	Ħ	9067	3.8	342	1957 1958 1959	2 1 1	9070 9930 10970	3.6	349 359 374	1 1 1	10580 11450 10930	387 427 390	1 1 1	10595 11412 11467	375 403 416
95549	3 23	31	11869	4.0	468	1956 1957 1958 1959	2 8 9 12	9920 11279 11841 12334		364 424 462 506	2 5 11	12010 13486 12827	426 514 490	5 11	12404 13016	453 494
95561	9 29	46	13572	3.7	495	1954 1955 1956 1957 1958 1959 1960	1 7 11 10 10 5 2	8610 11496 12615 13382 14608 14284 16915	3.7 3.7 3.7 3.6	364 421 465 487 533 502 705	1 4 8 4 2	13320 10910 14115 13988 16080	495 395 515 504 610	1 3 8 4	10562 10548 13388 14503	424 382 488 523
95608	1 77	117	12391	3.7	457	1954 1955 1956 1957	1 16 27 15	9360 11563 11710 12205	3.8 3.7	310 438 435 451	2 ! 7	12675 11534 13074	462 430 473	3 8 6	11838 11417 11703	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED,

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

79

AULE 13.	8Y YEAR		HENING		ROS FR		STATE ONL	.Υ			tot cuentuc	VEAD		,		
	OAUGHTER	AVERAGE	81 211	K E		K	ECURU AVE	KAGE I	34 21K	EBY	TRESHENING		. AV.	YLARLY H	ERO AVE	RAGE
ŠIRE NO.	OAUGHTERS NO.	RECOROS NO.		PCT.		FRESH YEAR	NO.	L8.	TEST PCT.		RECURUS NO.			RECOROS NO.	MILK	
						1958 1959 1960	HOES1 17 34 7	12827 12833 13544	3.8 3.7 3.6	482 469 483	13 34 6	12565 12465 12182	447 457 447	11 34 5	12263 12657 12265	4.57 465 454
963422	? 14	26	11173	3.5	387	1954 1955 1956 1957 1958 1959	1 5 4 6 5	10350 11638 11220 11968 11763 10930	3.3 3.4 3.6 3.4 3.3	338 392 396 410 390 388	1 1 2 5 5	12970 13010 12600 12942 11660	541 470 462	1 1 2 4 5	13723 10562 11238 12508 12073	512 474 423 442 438
963947	7 9	12	12999	3.8	492	1957 1958 1959	6 4 2	12088 13155 11995	3.6 3.9 3.7	438 517 442	3 4 2	10783 13303 11875	403 502 415	1 4 2	10595 11747 12132	375 424 440
964395	5 47	75	10800	3.7	39 2	1952 1953 1954 1955 1956 1957 1958 1959	20 7 6	11243 10355 10104 9593 10210 11076 13617 11277	3.6 3.8 3.7 3.6 3.5 3.8	425 383 363 359 374 392 477 423	2 4 3 6	10525 10300 9830 11395	470 404 418 446	3 4 2 6	10918 8025 7298 11603	377 322 451
964599	22	27	11843	3.5	411	1960 1955 1956 1957	11	7910 10000 11543 11668	3.9 3.7 3.2 3.5	360 368 406	i 2 4	11320	401 443 417	1 1 4	13309	397 472 447
						1958 1959 1960	6 3 1	13773 11970 12780	3.4 3.5 3.7	472 422 477	3 1	11973 12533 11830	452 454	3	12369 12851 13178	466
966218	3 25	30	10993	4.0	440	1955 1956 1957 1958 1959 1960	4 7 8 4 0	9103 10611 11735 13460 8720	3.8 3.8 3.9 4.0 4.2 4.1	429 349 415 468 566 358	4 6 1	10838 12977 13550	468 498 494	2 6 1	11255 12043 14301	450 478 525
966470) 13	20	11617	5.7	422	1955 1956 1957 1958 1959	3 5 7 4 1	12420 12218 11307 13210 15360	3.4 3.7 3.6 3.6 4.0	425 448 408 480 609	1 3 2 1	13980 12990 12760 14670	541 505 501 538	1 2 2 1	13505 11772 12028 13320	509 կներ կեն 505
967873	\$ 4	4	11703	3.7	436	1959	4	11703	3.7	436	4	12068	465	4	12437	460
969667	7 8	12	11775	4.0	461	1957 1958 1959 1960	3 5 1	13933 10013 11168 13260	3.9 4.0 3.9 3.6	542 394 439 477	2 1 5 1	14325 13030 12118 13550	518 465 430 484	1 1 4 1	13298 11881 13222 13898	497 417 474 482
969669	3	3	12437	3.9	477	1958 1959 1960	1 1 1	13820 7660 15830	3.7 4.4 3.6	515 340 577	1 1 1	12/90 12010 13100	492 417 520	1	12273 12208	456 426
974774	11	13	12552	3.7	469	1956 1957 1958 1959 1960	1 1 4 5 2	11590 11040 12293 12134 15390	3.9 4.0 3.8 3.7 3.5	448 444 459 459 542	1 2 5 2	15950 13280 11260 13900	527 483 420 487	1 1 2 5 1	9156 11565 10830 11096 14988	372 508 395 426 554
975683	3 10	14	12653	3.7	468	1958 1959 1960	6 7 1	13082 12984 8010	3.7 3.6	489 478 290	6 7 1	12828 12203 12610		3 7	11518 12489	416 459
976472	2 102	142	11862	3.8	453	1955 1956 1957 1958 1959 1960		12205 11409 12049 12339 12364 11751	3.8 3.8 3.9 3.9	463 425 459 483 476 444	1 2 10 38 8	14170 14020 11482 11977 12470	533 535 434 457 474	1 2 10 36 7	12818 12911 11191 12305 12185	456 489 417 471 451
976709	> 5	5	12036	3.7	446	1958 1959	1 4	9690 12623	3.7 3.7	344 472	4	12040	457	4	11996	470
977110) 1	1	8840	4.0	3 58	1956	1	8840	4.0	356						
978516	5 14	21	11963	4.0	473	1956 1957 1958 1959	4 7 4 6	11755 10761 10870 14637		460 415 460 581	1 3 4 6	14300 13123 12413 14770	509 471 472 557	2 3 4 6	14868 12833 12565 14207	592 465 467 544
978750) 17	21	11217	3.6	403	1956 1957 1958 1959	2 1 6 12	7755 13470 10628 12467	3.9 3.5 3.7 3.5	306 467 393 439	14 10	12538 12059	483 433	5 11	11744 12143	440 439
981308	3	4	10183	3.9	392	1959	14	9730	4.0	382	3	10507	431	4	10685	419
984799) 11	16	12805	3.8	483	1958 1959 1960	ម ស ម	12493 11896 14383	3.₺	464 446 559	t4 13	11070 12106 12015	426 474 509	4 8 1	11249 12227 9919	420 472 498

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RLCORDS NO.		TEST PCT.		FRESH YEAR	RLCORUS NO.	L8.	TEST PCI.				FAT	YEARLY HI RECORUS NO.	MILK	FAT
							HOLS.									
987086) 4	7	10058	3.7	365	1951 1952 1955 1956 1958 1959	1 1 2 1	8980 11540 7620 9045 12140 12930	3.6 3.6	370 438 277 324 417 430	1	12970 12810	461 440	1	13222 12862	405 447
987869) 141	213	11505	3.8	430	1955 1956 1957 1958 1959 1960	26 35 51 46 46 9	1049 1 11460 11632 11593 12236 9441	3.8 3.8	391 427 442 435 459 343	7 30	13825 13179 11279 11863 11721	453		12410 12600 11419 12204 12021	464 464 440 467 446
986462	2 2	4	13684	3.5	479	1956 1957 1958 1959	1 1 1	18190 15340 11050 15420	3.5 3.7	581 540 413 511						
99022	2	6	15058	5.2	473	1954 1955 1956 1957	1 2 1 2	14300 15550 16910 15200	3.1	493 503 529 457						
995619) 16	26	11325	3.6	406	1954 1955 1956 1957 1958 1959 1960	1 5 4 4 6 5	8790 11386 10133 11398 12880 10822 15850	3.7 3.5 3.7 3.6 3.5	330 427 347 423 464 382 564	1 2 3 5	13360 13100 12965 13890 12726 14920	507 465 481 515 467 551	2 1 1 3 5	1358 1 13254 13472 13654 1256 1 12927	454 475 486 489 457 479
996252	2 2	3	13848	3.8	525	1956 1957	1 2	13250 13945	3.7 3.8	494 524						
99/48	3	3	10223	4.0	409	1956 1958 1959	1 1 1	8230 11800 10640	4.0 4.1 3.9	326 484 416	1	12760	459			
999938	3 2	14	11594	3.6	418	1953 1954 1955 1959	1 1 1 1	14190 11720 11730 10640		483 375 389 419	1	10510	375	1	11521	420
1000390) 6	6	14647	4.0	580	1958 1959 1960	1 4 1	11870 15120 15530		460 598 626	ц 1	11473 13270	493 510	ų	11699	48 I
100150	2 9	9	12240	3.7	451	1957 1958	3 2	10300 14700	3.6 3.7	3/0 533	2	13135	494	1 7	13363	
100151	2 1	1	12040	1. 7	66.	1959 1958	1	12465	3.8	4/1	4	9925	385	3	10922	415
100359			12930	4.3	550	1959	1	10380		556 430	1	14510	546 447	1	12927	477
100423	2 1	1	8610	3.8	325	1960		8610	3. მ	325						
100686		19	12302		470	1954 1955 1956 1957 1958 1959	1 1 3 6 7	10380 11460 9110 8997 12123 12970	3.8 3.8 3.9 3.8 3.7	397 431 353 338 444 516	1 4 7	11970 13525 12427	420 480 487	1 4 7	10900 12808 12594	
100719	4 21	26	10859	3.6	391	1956 1957 1958 1959 1960	1 3 9 12 1	10080 10570 11037 11220 9470	3.5 3.7	363 370 401 401 331	3 5 12 1	10987 11144 10798 10100	404 417 401 348	3 5 12 1	11489 10566 11658 10388	373 429
100768	0 в	8	11819	3.8	454	1959 1960	7 1	12371 7950	3.8 4.1	472 328	7	13860	512	7 1	14480 14181	
100862	2 1	2	11915	3.6	426	1958 1959	1	11760 12070		423 428	1	9890 10320	383 394	1	9407 10944	
100937	2 4					1958 1959	1 2	9280 12215	3.6 3.5	335 420	1	10290	<i>3</i> 96	2	10704	416
101020	5 2	5	10887	5.6	393	1952 1953 1954	2 2 1	10970 11125 10140	3.7	386 402 398						
101198	0 77	86	13065	3.9	510	1958 1959 1960	15 53 18	13536 13059 12437	4.0	507 520 487	12 53 17	13158 12085 12589	517 484 484	12 52 13	12172 12246 12737	490
101259	3 3	3	13223	5.9	486	1959	3	13223	3.9	486	3	12120	561	3	11456	512
101303	6 4	4	11325	3.5	389	1957 1960	3 1		3.5 4.0	408 331	ک	10740	393	2	13064	478
101376	0 8	10	11816	3.5	419	1957 1958	3 5	9990 12244	3.4 3.4	347 420	2 3	13185 12380	461 461	1 3	10595 11696	

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	84 21s	RE		к	ECURD AVE	KAGE 5	Y SIR	ΕĠΥ	FRESHENING	YEAR				
51 RE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAI L8.	FRESH YEAR	RECUROS NO.		TEST PCT.	FAT LB.	305-DAY RECURUS NO.			YEARLY HO		FAT
						1959	HOLST	LIN 12220	3.8	468	2	10940	392	2	11667	4.5
1016852	1	1	9410	3.8	355	1955	1	9410	3.0	355						
1020277	2	3	11338	3.8	424	1958 1959	1 2	14360 10880	3.4 3.8	494 402	1 2	12500 12910	478 486	1 2	13156 128 7 3	504 484
1021571	1	1	12890	3.6	469	1960	1	12890	3.6	469	1	12660	489			
1022095	1	1	13750	3.6	489	1959	1	13750	3.6	489	1	11270	448	1	13265	401
1022601	14	19	10900	3.6	392	1957 1958 1959 1960	1 6 10 2	7370 10532 12184 10715	4.6 3.6 3.4 3.9	339 376 419 421	1 6 10 2	11690 13165 12977 11220	455 489 468 409	6 10 1	12292 13322 9701	435 484 366
1023347	32	37	11012	3.8	413	1957 1958 1959 1960	1 14 21 1	11610 11383 10797 16510	3.8 3.7 3.9 3.8	436 421 415 622	1 11 19 1	12400 11160 11251 12860	452 423 429 478	1 10 19 1	11020 12013 11639 12203	422 449 440 448
1023967	1	1	7560	3.9	298	1955	1	7560	3.4	298						
1025792	: 64	124	11268	3.8	426	1952 1953 1954 1955 1956 1957 1958 1959 1960	11 13 17 21 22 10 13 7	10899 11416 10050 11222 10424 11887 13489 11606 15798	4.0 3.0 3.8 3.8 3.8 3.8 3.6 3.7	437 432 382 424 390 448 506 432 569	1 9 5 3	10940 12738 11196 15467	408 480 423 543	1 8 5 4	10192 12316 10852 14604	363 454 414 528
1025902	1	1	8690	3.7	324	1958	1	8690	3 • 1	324						
1026115	5	5	14612	3.7	542	1957 1958 1959 1960	1 1 2 1	19120 15150 13020 12750	3.3 3.5 4.2 3.6	635 525 543 463	1 1 2 1	15490 13660 11705 11080	553 521 423 376	1 1 2 1	15042 15118 12546 10824	550 556 487 391
1020123	65	84	12180	3.7	449	1952 1953 1954 1955 1956 1957 1958 1959	1 2 2 2 1 4 13 47	11000 10605 9930 10810 14220 11575 12078 12247 12650	5.0 3.8 3.6 3.6 3.7 3.7 3.7	547 400 371 394 516 399 443 457 462	5 10 44 12	12100 12952 11749 12431	427 470 436 451	3 10 44 7	12059 12299 12094 11732	456 456 450 431
1029279	2	2	11605	4.1	482	1959	2	11685	4.1	482	2	11390	399	1	14037	499
1030404	2	3	13910	3.8	524	1958 1959	1 2	16820 13405	3.9 3.8	650 503	1 2	13760 13435	492 485	2	14421	525
1030458	1	3	11780	3.7	431	1957 1958 1959	1 1 1	12980 11710 10650	3.6 3.6 3.6	495 419 380						
1030640	1	1	13240	4 • 3	565	1958	1	13240	4.3	565						
1031501	1	1	12336	3.8	473	195 <i>1</i>	1	12330	3.8	473						
1032815	18	19	11124	3.8	425	1959 1960	15 4	11999 7155	3.8 3.9	458 279	15 3	11627 12173	455 485	14	12365 11710	477 456
1033024	10	11	11359	3.7	410	1958 1959 1960		11690 11473 10950				14100 11170 13960			13135 12460 13015	
1033908	4	4	15120	3.7	549	1959	4	15120	3.7	549	4	14290	525	4	14091	534
1034466	6	11	11525	3.9	443	1955 1956 1957 1958	3 4	12817 12100 11175 11110	4.1 3.8	486						
1034467	5	5	11824	3.5	423	1959 1960	4 1	12048 10930	3.6 3.4	435 3 7 3		11525 10500		3 1	12003 9974	478 349
1034472	2 59	88	11532	3.9	450	1952 1953 1954 1955 1956 1957 1958 1959	6 7 10 12 18 6 23	11704 11120	4.0 3.9 3.9 3.9 3.9	459 456 431 464 467 571 450	2 2 3 21	11040 11040 13905 14160 11738 12697	481 587 544 468	1 3 21	13429 11663 13447 12106 12274	414 512 486
1035889	1	1	13460	3.4	462	1959	1	13460	3.4	462	1	14820	611			
1038118	225	279	12487	4.1	510	1957 1958		11868 12470				16270 13367			15097 13309	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY FIRE

	21103111611															
SIKE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECURDS NO.	MILK LB.	TEST PCT.	FAT	305-DAY (RECORUS NO.	MILK		YEARLY HI RECORDS NO.	MILK	
						1959 1960	HOLS 175 30	TEIN 12611 11891	4.1 3.9	519 465	16 <i>1</i> 22	13156 12632	500 465	160 26	13385 12807	513 485
1038591	87	138	11681	3.9	452	1952 1953 1954 1955 1956 1957 1958 1959	1 13 21 25 21 11 34 8	10320 12750 9571 10076 10995 12583 11901 12592 12100	3.8 4.0 3.9 3.9 3.9 3.8 3.7 3.9	395 509 375 395 431 483 444 491 450	2 1 6 32 6	12520 11300 13010 12697 11620	463 450 483 480 443	2 1 7 32 6	10966 11467 12001 12929 12066	417 393 456 493 454
1045647	7 55	100	10118	3.9	394	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 8 5 6 13 24 19 13 7	10490 10719 12326 11537 10792 9723 11181 9893 10279 3880	3.7 3.9 3.9 4.0 3.7 4.0 3.8 4.8	390 423 475 457 404 386 439 389 390 186	2 1 7 5 1	8450 11140 9266 10982 10510	334 419 342 413 449	2 2 7 6	7385 10960 10025 11480 9527	288 403 384 427 409
1049547	7 20	21	12539	3.7	459	1958 1959 1960	1 16 4	13480 12594 11900	3.3 3.7 3.7	452 463 433	1 16 4	15210 12123 11193	599 450 395	1 15 4	12230 12821 10933	435 478 394
1052808	6	7	12094	3.8	452	1959 1960	6	12222 11230	3.8 3.6	461 401	6	11913 12970	444	6	12059	451
1054406	5 12	17	11566	3.7	432	1956 1957 1958 1959 1960	1 3 6 5 2	9040 11507 11950 12274 11150	3.8 3.6 3.6 3.8 3.9	342 416 431 401 431	4 5 2	14053 13556 13475	499 504 483	1 5 1	11609 14157 13832	416 527 499
1054496	5 1	1	14820	4.1	611	1959	1	14820	4.1	611	1	13460	462			
1055483	3 3	5	11665	3.9	446	1958 1959	2 3	12860 11730	3.5 3.9	452 453	2 3	11495 11250	423 453	1 3	12099 12208	42 I 462
1056882	2 43	52	12945	3.7	476	1956 1957 1958 1959 1960	6 9 10 24 3	10692 12603 13853 13460 12837	3.7 3.7 3.9 3.7 3.5	387 459 534 496 443	2 6 24 2	13355 13930 12945 11040	492 528 477 402	6 24 3	12675 12922 12520	477 479 458
1061894	4 3	łį	10653	3.6	390	1959 1960	3 1	11550 1480	3.0 3.4	420 50	š	12663	465	3	13465 11434	496 428
1061911	1 3	5	10885	3.6	396	1958 1959 1960	1 3 1	11660 10650 11280	3.2 3.6 4.1	376 391 458	1 3 1	11650 11303 12470	420 420 404	1 3 1	12099 12989 11434	421 482 428
1063381	1 22	23	11827	3.7	434	1959 1960	16 7	12313 10036	3.6 3.8	446 381	15 6	12971 12683	477 468	16 5	13312 11190	486 416
1068501	1 3	14	11888	5.8	446	1957 1958 1959	2 1 1	13455 11190 11020	3.7 3.7 3.9	502 409 427	ı	11390	420	1	12933	468
1074357	7 3	6	9839	3.6	358	1953 1954 1955 1956	1 2 2 1	8980 10210 9740 12600	3.6 3.6 3.3	325 386 352 418						
1079736	5 2	2	13625	4.0	554	1959	2	13625	4.0	554	2	13100	552	1	16601	6 53
108 12 70	0 4	6	12963	4.0	525	1956 1957 1958 1959	1 2 2 1	15950 13355 12960 14320	3.8 4.1 3.9 4.2	610 543 509 606	1 2 2 1	13060 11630 12960 13110	440 429 505 506	1 1 2 1	13254 13472 13369 13265	495 486 503 510
1081681	4 5	8	12500	3.9	485	1955 1958 1959	1 3 4	9460 13073 13350	4.1 4.0 3.9	389 519 508	3 4	13093 13705	490 509	3	12804 13295	477 496
1085462	2 34	38	13029	3.8	487	1958 1959 1960	8 26 4	12703 13202 12283	3.7 3.8 3.8	466 493 466	5 24 1	13672 12206 13140	555 485 488	5 21 1	11940 11909 12491	473 463 469
1085978	в 7	7	14640	3.9	56.3	1959 1960	ц 3	14765 14473	4.1 3.6	602 516	4 3	13710 12073	528 436	4 2	14789 13217	557 509
1086776	6 i	1	13160	4.2	540	1959	1	13160	4.2	546				1	13287	491
108797	4 3	4	14680	3.7	531	1959	4	14723	3.7	540	3	12057	479	2	13298	502
108870	9 2	5	15758	3.6	56∠	1956 1957	2	15395 16360	3.6 3.6	548 580	1	152∠0 16710	59 I 6 I 6	1	14268	5.18

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

	UAUGHIEK	AVERAGE	01 211	VE.		,	CCURD AVI	CKAGE 6	31 31K	. 01	FRE SHENTING	ICAK				
SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-0AY (RECOROS NO.	ONTEMP MILK L8.	FAT	YEARLY HE RECORDS NO.		
						1958	HOLS	TEIN 13350	3.6	475						
1090258	3 1	1	8930	3.8	336	1959	1	8930	3.8	336	1	9740	343	1	10867	401
1090666	1	1	10180	3.5	354	1954	1	10180	3.5	354						
1092773	1	1	13260	3.3	440	1956	1	13260	3.3	440	1	10830	450	1	12110	460
1094721	7	9	11455	3.7	432	1957 1958 1959	2 3 4	9900 10757 13135	3.8 3.6 3.8	376 390 498	1 3 4	13600 13897 12195	489 508 461	1 3 4	12219 11216 12652	434 398 477
1096634	1	3	11130	3.9	436	1954 1955 1956	1 1 1	11530 12210 9650	4.0 3.8 4.0	457 467 383						
1098258	16	16	12888	3.5	457	1959 1960	13 3	12945 12640	3.6 3.5	460 441	1.3 3	12557 10800	475 389	12 3	12626 11899	470 433
1100193	5 5	8	13270	3.6	469	1958 1959 1960	1 6 1	14860 13110 12480	3.4 3.7 3.3	501 476 414	1 6 1	160 10 12685 14120	538 479 533	6	13603	507
1105728	1	1	11700	4.4	513	1959	1	11700	4.4	513	1	12450	469	1	10987	427
1106775	4	4	13800	3.7	506	1958 1959	2 2	12340 15260	3.8 3.6	471 542	2 2	14120 14195	490 511	2 2	14088 14503	512 531
1111075	5	7	13462	3.7	493	1958 1959	2 5	13620 13566	3.7 3.6	508 493	2 5	14610 12906	528 484	2 5	14078 12973	513 479
1111076	2	2	13285	3.8	499	1959	2	13285	3.8	499	2	13390	514	2	13620	510
1113278	6	7	12906	3.7	483	1958 1959	1 6	13920 13082	4.1 3.7	565 490	1	14970 13195	528 472	1 5	13789 13052	484 472
1113559	3	5	9642	3.6	340	1954 1955 1956	1 3 1	10410 9037 10080	3.5 3.6 3.5	367 328 354						
1113778	3 1	1	18920	4.0	760	1959	1	18920	4.0	760	1	16500	673	1	14126	585
1113862	2	2	9400	3.9	364	1954 1955	l 1	11130 7670	3.8 3.9	426 302						
1115014	8	9	12688	3.7	461	1956 1957 1959 1960	1 2 5 1	10010 10390 12798 16500	3.6 3.6 3.8 3.3	365 367 481 540	5	10982 14850	403 554	5 1	11543 12927	423 479
1119514	5	5	12514	3.5	438	1957 1959 1960	1 3 1	15410 12043 11030	3.4 3.5 3.6	519 425 397	3 1	12303 14180	483 558	2	12628	464
1125395	i 4	5	10590	3.8	401	1956 1957 1958 1959	1 1 1 2	7990 13760 13400 10395	3.8 3.7 3.9 3.8	302 511 516 394	2	11445	452	2	12617	462
1127372	<u>.</u> 4	6	11000	3.7	397	1955 1956 195 <i>7</i>	1 3 2	14210 11817 8590	2.9 3.8 3.7	409 449 316						
1132993	3 11	14	13608	3.8	513	1957 1958 1959	2 4 8	13715 13175 13446	3.5 4.0 3.9	479 520 517	1 4 8	12020 13168 12999	407 503 482	1 4 8	13472 12633 12734	486 468 477
1134627	1	3	7377	3.8	277	1955 1956 1957	1 1	8230 6470 7430	3.7 3.7 3.9	305 241 286						
1134953	3 1	1	9310	3.9	364	1956	1	9310	3.9	364						
1138655	5 1	1	14350	3.5	491	1957	1	14350	3.5	497						
1140763	3	3	10877	3.8	413	1959 1960	2 1	11605 9420		438 362	2 1	12330 10590	448 363	2	13037 9974	479 349
1143578	3 4	7	13571	3.7	486	1956 1957 1958 1959	1 1 1 4	10680 12090 12170 13313	4.0 4.2	393 484 516 476	1 1 1 4	8960 10410 11260 11575	328 377 414 423	1 1 1 3	10202 10595 11412 12368	373 375 403 449
1149460) 1	1	12130	4.0	480	1960	1	12130	4.0	480	1	12/60	467	1	12393	468
1151863	3 3	3	15750	4 - 2	657	1959 1960	1 2	17900 14675		801 586	1 2	11510 12835	482 492	1	9167	403
1153740	5	6	12218	4.0	489	1959 1960	5 1	12416 10530		502 351	5 1	12230 11790	478 458	5	12018 12132	473 458
1156059	5	5	10894	3.8	412	1959 1960	4 1	11218 9600		440 300	3 1	11757 11320	436 421	3 1	12150 10900	447 423
1157094	4 3	4	9913	3.3	324	1956	1	12000	3.2	389						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EXCEU,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SI'RE NO.	OAUGHTERS NO.	RECOROS NO.		1 E S T P C T .		FRESH YEAR	RECORUS NO.		TEST PCT.	FAT L8.	305-UAY RECORUS NO.			YEARLY HI RECOROS NO.		FAT
						1957 1959	HOLS 2 1	TLIN 11100 8490	3.3 3.3	354 283	1	7760 7460	277 282	1	9352	342
115772	2 1	2	11360	4.2	470	1958 1959	1	12610 10110	4.0 4.3	500 439	1	11760 11480	449 447	1 1	12306 11576	461 447
115780	5 3	3	14473	3.4	495	1957 1958	1 2	15886 13770	3.3 3.5	⇒30 478	1 2	13150 11830	472 471	1	14933	536
115056	36	ել ել	11301	3.9	439	1956 1957 1958 1959 1960	1 11 13 16 3	9450 11784 12675 10949 10920	4.0 3.8 3.8 4.0 3.7	380 448 467 433 409	1 5 16 3	14370 14700 11457 11113	540 547 439 427	1 5 16 3	11957 13381 11384 11732	458 508 442 447
1163116	5 15	17	12656	3.6	459	1956 1957 1958 1959 1960	1 1 1 13	12920 9020 17530 13003 19370	3.6 3.7 3.9 3.6	461 331 678 471	1 1 13	11250 13670 12164	361 530 455	1 1 12	12448 12927 12970 14791	452 477 477
116401	3 2	2	13525	3.7	487	1959	2	13525	3.5	673 487	2	11770	420	1	12296	577
117048		6	9880	3.9	383	1957	2	10055	3.9	392	2	11900	412	_		, , ,
						1958 1959	1 3	10910 9420	3.8 3.9	411 368	3	10747	410	3	11449	454
117091	0 3	3	12207	3.8	460	1959	3	12207	3.8	460	3	12730	482	3	13436	496
117540	4 6	7	12553	3.8	477	1957	1	10970	3.6	397	1	11820	438	1	13244	472
						1958 1959	1 4	10670 13418	3.1 3.9	399 518	4	13470	479	4	13652	494
						1960	1	11830	3.7	437	1	14290	487	1	13026	485
117546		1	13420	3.6	483	1959	1	13420	3.6	483	1	11430	446	1	11576	447
117957	4 9	12	12498	3.8	476	1958 1959 1960	4 7 1	11136 13437 10690	3.8 3.8 4.0	426 511 426	7 1	13388 13340 11940	483 500 459	4 7 1	12448 13729 11990	451 515 451
117957	5 3	3	12593	3.5	442	1959	3	12593	3.5	442	3	12087	454	3	12003	447
117972	9 3	3	12843	3.6	456	1958 1959	2 1	12660 13210	3.7 3.3	464 439	1	10250 12730	463 469	1	10213 13734	389 511
118075	3 5	7	11097	3.6	400	1957 1958 1959	3 2 2	9773 11630 11985	3.5 3.5	357 408 449	2 1 2	10530 11340 11990	390 423 429	1 1 2	10595 11412 12470	375 463 448
118101	2	2	11965	4.0	474	1959 1960	1	11890 12040	3.8 4.1	456 492	1	14460	542	1	15140	595
118167	5 7	10	12307	3.6	442	1956 1957 1958	3 3 1	11683 12813 14480	3.6 3.7 3.7	428 474 540	1	8420	321			
						1959	3	13610	3.5	475	3	12017	463	3	12477	473
118484		7	11312		460	1959 1960	5	11928 6270	4.0	481 261	5 1	13010 11730	482 469	5	13651 11990	505 434
119015	1 11	11	12175	3.7	451	1958 1959 1960	1 8 2	15300 11805 12095	3.8 3.6	503 451 428	1 8 2	14910 12975 13680	553 489 503	8 2	13334 13985	498 508
119192	7	৪	11233	3.5	400	1957 1958 1959	4 1 3	10830 12470 11403	3.6 3.7 3.5	582 467 408	3 1 3	12123 13600 10947	432 488 403	3 1 3	11238 11870 10995	402 428 407
119278	4 1	2	15360	5.7	553	1958 1960	1	17560 13160	3.6	626 480	,	10741	403	1	13745	494
119278	9 1	1	12870	3.8	489	1959	1	12870	3.8	489	1	11520	417	1	12077	436
119294	5 1	1	7420	3.4	253	1959	1	7420	3.4	253	1	11520	450	1	11576	447
119393	4 1	1	9610	3.6	349	1959	1	9610	3.6	549	1	10460	384	1	11641	477
119416	5 2	2	16360		693	1959	2	16360	4.2	693	2	13700	559	2	13587	555
119416	5 2	2	14605		614	1959	2	14605	4.2	614	2	13225	517	2	13532	529
119469	1 5	6	13295	3.5	471	1950 1959	3	13447 12617	3.6	405 442	1 3	13520 12803	475 455	1 3	13200 13323	
120735	4 10	11	11180	3.6	397	1957 1958 1959	4 3 4	11498 10427 11926	3.5 3.7 3.5	407 577 422	ا خ	16150 10670	570 392	1 3	15947 11038	554 400
121239	5 1	1	16590	3.5	585	1959	1	16590	3.5	285	1	17440	646	1	16383	
121589		2	10845		387	1958	1	12830	3.6	456	1	13670	549	1	11325	416
121612	3 2	3	12485	3.8	468	1959 1958	2	8860 10540	4.3	317 453	1	11130 14530	521	1	11609	309 416

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY STRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORUS NO.		TEST PCT.	FAT LB.	SOS-DAY RECORUS NO.			YEARLY HE RECORDS NO.		
						1960	HOLS'	TE IN 14430	3.3	482	1	12970	464	1	13026	485
1216124	3	5	8480	3.6	296	1957 1958 1959 1960	1 2 1 1	9700 10110 12160 5740	3.3 3.4 3.1 3.9	319 338 372 221	1 2 1 1	10930 10740 11520 12830	392 390 400 461	1 2 1	10595 10540 11467	375 382 416
1216908	1	1	10610	4.0	426	1960	1	10610	4.0	426	1	9000	336	1	12982	481
1216909	2	3	10850	3.4	370	1958 1959	1 2	11390 10480	3.5 3.4	376 358	1 2	8150 11515	პ0 გ 4 18	2	12851	457
1216957	خ خ	3	9343	4.1	386	1959	3	9343	4.1	386	ځ	12297	470	3	12633	48 I
1224123		1	12680	3.8	480	1959	1	12680	3.8	480	1	11100	420	1	13440	509
122452		1	13940	4.2	581	1959	1	13940	4.2	581	1	12730	471	1	12640	483
1229162	2 30	36	13546	4.1	552	1958 1959 1960	22 6	14876 13142 14318	4.1 4.0 4.1	609 529 587	2 l 6	14730 13302 12867	606 517 502	8 ∠1 4	13957 13141 12301	553 513 484
1230960) 1	1	8780	4.4	389	1958	1	8780	4.4	389	ı	12870	485			
1232453	10	12	12666	3.8	479	1958 1959	8	12110 12953	3.8 3.8	459 484	2 1	14955 13006	586 536	7	13712 12711	532 509
1233752	: 1	1	13890	3.9	545	1959	1	13890	3.9	545	1	12660	470	1	12840	481
1230249) 1	1	14570	3.6	523	1959	1	14570	3.6	523	1	14240	547	1	14225	548
1239889	3	3	8800	3.7	332	1959	3	8800	3.7	332	3	10820	408	3	11351	429
1239886	2	2	13100	4.0	515	1959	2	13100	4.0	515	2	12130	454	2	12693	465
1240095		ų	12418	3.7	449	1959 1960	ک ا	12623 8010	3.6 4.0	453 321	3 1	12217 13050	440 487	3 1	12793 12055	468 463
1240125		2	10505	4.1	432	1959	2	10505	4 - 1	432	2	11385	391	1	11478	403
124 1982		'	13590	3.2	434	1960	1	13590	3.2	434	1	11300	427			
1242163		1	14740	3.3	489	1959	1	14740	3.3	489	1	12830	462	1	10682	401
1242164		1	8060	3.4	275	1960	1	8060	5.4	275	1	10330	409			
1243656		38	12273	3.9	476	1959 1960	30	12214	3.9	474	29	12563	488	28	12585	491
1244917		3	11237	3.5	380	1959 1960	2	9970 11870	3.7	368 386	1 2	11460	424	1	12797 8186	457 295
1245520		2	9595	3.7	354	1959	2	9595	3.1	354	2	9695	355	2	10203	3/4
1246215		3	80/3	3.6	290	1959	3	8073	3.6	290	3	9800	359	3	11074	398
1246450		2	11105	4.0	445	1959	2	11105	4.0	445	2	11470	447	2	11647	443
1250260		9	11928	3.7	475	1959	5	11840	3. s	475	,	10422	434	5	10793	464
1230200	, ,	,	11720	3.1	443	1960	4	12038	3.7	442	4	11233	412	4	11393	417
1252934	3	3	12 193	3.8	461	1959 1960	2	12180 12220	3.7 4.0	450 484	2 1	11565 12670	441 458	2	13309	492
1254663	3 1	1	10970	3.4	376	1960	1	10970	3.4	376	1	13190	475	1	13015	482
1254845	5 4	5	11014	3.9	432	1958 1959	1 4	14210 10650	4.0 3.8	571 412	1 4	13330 11278	492 426	1 4	12459 11126	435 426
1255055	7	7	12983	3.6	470	1959 1960	6	13217 11580	3.6 3.7	478 425	6	12628 12780	475 498	6	12693 12426	481 470
1255099	2	2	9735	3.8	367	1959	2	9735	3.8	367	2	8860	329	2	10393	396
1258022		1	9710	3.9	376	1959	1	9/10	3.9	376	1	12660	480	1	14617	550
1261298		4	11800	3.7	437	1959 1960	2	13595	3.8 3.6	514 361	2	12425 11265	463 387	2	11849 11920	447
1262324		1	8690		291	1960	1	8690	3.3	291	1	ช500	296	1	8186	295
1263834		2	9720		393	1959 1960	1	11030 8410	4.5 3.4	49 7 288	1	11920 11800	462 40 э	1	10508 10824	422 391
126444		1	8430		328	1959	1	8430	3.9	328	1	9280	368	1	10420	4(13
126813		2	12320		471	1959 1960	1	11700 12940	4.5 3.2	524 418	1	11910 11050	462 384	1	10508 10824	427 391
1264971) 1	1	12540	4.1	515	1960	1	12540	4.1	515	ì	12010	424	1	12709	449

VLRMONT 86

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	FRESH YEAR	RECORDS ND.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.	MILK		YEARLY HE RECORDS NO.	MILK	
1271758	8 2	2	9885	3.5	345	1959	2	9885	3.5	345	2	12380	436	2	12797	404
1275113	3 1	1	11350	3.6	408	1960	1	11350	3.6	408	1	12490	470	1	13113	489
1276286	6 1	1	12300	3.5	420	1959	1	12300	3.5	426	1	12100	435	1	12797	464

VERMONE

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

\$1KE •0N	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	KECORUS NO.	L8.	TEST PCT.		305-0AY C RECORDS NO.	MILK	FAT			FAT
							JERS	EY								
283110	3	7	4949	5.1	251	1947 1948 1949 1950 1951	1 1 1 2 2	4700 5750 6070 4240 5405	5.1 4.8 5.1 5.3 4.9	243 277 308 222 264						
356655	2	8	6791	5.0	337	1947 1950 1952 1953 1954 1955 1956	1 1 1 1 1	6220 5890 7320 6410 6660 6270 8990 9990		313 318 333 293 320 308 443 502						
375364	. 1	1	8260	5.8	479	1951	1	8260	5.8	479						
377872	2 2	7	8539	5.3	451	1952 1953 1954 1955 1956 1959	2 1 1 1	8580 8060 8060 8220 9650 7660		469 443 461 419 515 383				1	687მ	356
385252	2 1	2	5415	5.5	297	1951 1952	1	5000 5830	5.3 5.5	273 321						
386941) 4	14	6577	5.1	337	1947 1948 1949 1950 1952	նկ նգ 1 նգ 1	6268 6573 5140 6918 6680	5-1	331 338 203 345 369						
388705	o 1	4	6908	5.1	349	1950 1951 1952 1953	1 1 1 1	8080 6210 8610 4730	4.5 5.2 5.0 5.8	364 324 430 2 / 6						
392869	9 2 7	86	718/	5.6	397	1949 1950 1951 1952 1953 1954 1955 1956 1957	2 11 18 17 15 10 6 3 3	6990 7096 7594 7105 7447 7295 8592 8770 8147 7840	5.5 5.7 5.2 5.4 5.6 4.9	402 399 421 403 369 390 480 431 385						
395583	3 54	113	7465	5.0	3/5	1952 1953 1954 1955 1956 1957 1958 1959 1960	3 16 17 28 21 12 9 6	7030 7677 7150 7169 7860 8632 7530 8405 8840	5.3 5.2 5.1	306 406 369 362 393 439 383 400 384	1 1 3 1	8940 8850 8303 9680		1 3 4 4	\$131 9948 8197 0766	426 468 409 411
597611	1 1	3	5953	5.5	325	1953 1954 1955	1 1 1	3020 4790 8050	6.2 5.1 5.2	313 245 4 1 8						
398690	3	4	7375	5.1	376	1949 1950	1 5	6830 6857	4.9	334 355						
39∀∠3₺	4 8	28	6548	5.1	334	1947 1948 1949 1950 1951 1952 1953 1954	10 3 4 3 3 2 1	6070 7770	4.6 4.9 5.1 5.1 5.2 5.0 4.7	327 341 330 359 307 402 316 261 270						
399903	3 6	18	8529	5.1	426	1949 1951 1952 1753 1954 1955 1956 1957	2 4 3 2 2 1 1	9375 7850 6035 7770 8200 7715 7950 8220 15060	5.5 5.7 5.2 5.2 5.0 5.0	530 422 341 402 425 383 394 394 667	ı	10000	545	1	11543	580
40172	3 3	6	4400	6.3	273	1947 1948	1 4	5370 4305								

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE 8Y SIRE

	UAUGHTER	AVERAGE	8Y 51	RE		R	ECORO AVE	RAGE	SY SIR	E BY	FRESHLNING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		305-UAY C RECORUS NO.		FAI	YEARLY HE RICORUS NO.		FAT
						1949	JERS I	3810	5.8	219						
402762	2 1	ų	9033	4.9	կկ႘	1948 1949 1950 1951	1 1 1	7960 9470 9610 9090	5.0 5.2 5.0 4.5	398 497 484 412						
403320	88 0	206	7318	5.3	390	1951 1952 1953 1954 1955 1956 1957	8 33 46 52 32 21 10	7261 7641 7799 7260 7479 7712 7061 6300	5.0 5.3 5.4	365 404 425 390 396 413 385 321	1	7560	428	1	9189 8666 7957	
405148	В 1	1	6690	4.8	324	1949	1	6690	4.8	324						
40686	7 цц	138	7835	5.2	409	1950 1951 1952 1953 1954 1955	9 13 32 21 22 20	7292 8003 8175 8459 8126 8116	5.1 5.3 5.3 5.4 5.3	358 407 429 443 438 430	2	8205	450	1 2	8687 8143	388
						1956 1957 1958 1959	11 7 2 1	8086 7893 9910 8510	5.5	432 431 544 410	2 1	8565 6410 7310	428 360 371	2 1 1	8938 8443 6747 8175	456 450 277 412
406995	5 I	1	11360	4.7	533	1958	1	11360		533						
40797	1 86	220	7295	5.3	386	1950 1951 1952 1953 1954 1955 1956 1957	5 18 45 44 46 33 15 8	6888 7495 7324 7483 7307 7739 7078 6865 8367	5.3 5.3 5.3 5.3 5.3 5.4	360 384 391 398 386 412 374 366 418						
						1959	3	8040		384				2	9887	394
409690	0 5	20	8423	5.5	462	1947 1948 1949 1950 1951 1952 1953 1954 1955	3 3 4 2 1 2 2 1 1	6813 8540 9528 8205 12190 9915 10695 8770 12030 7980	5.6 5.3 5.7 5.8 5.9 5.8 5.4 5.6	334 471 502 471 707 580 617 477 672 422						
41157	i 8	25	7453	5.2	384	1950 1951 1952 1953 1954 1955 1956	3 3 5 5 1	6290 7310 8367 8206 8148 8393 7590	5.6 5.5 5.1 4.7 4.8 4.7	362 402 452 417 388 408 355 396						
41367	8 2	3	6885	5.1	331	1951	3	5973	5.2	298						
41484	4 2	4	6909	5+1	346	1952 1954 1955 1956	 			34 1 373 343 337						
41707	4 2	2	1215	4.9	350	1949	2	7215	4.9	350						
41764	4 1	1	4180	4.9	203	1953	1	4160	4.9	203						
42∠9 8	8 16	39	6831	5.2	351	1951 1952 1953 1954 1955 1956	6 9 7 8 5 4	6643 7232 6081 7254 6286 7420	5.0 5.1 5.1 5.1	352 360 310 372 319 370						
42436	9 2	2	9360	5.0	468	1951	2	9360	5.0	468						
43119	8 60	146	7797	4.9	382	1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	9 23 37 23 21 12 10 8 1	7423 7223 7889 7783 7924 8174 8553 9613 7690 7995	5.1 5.0 5.0 4.7 4.8 4.6 4.7	375 364 394 385 372 385 391 446 321 418	l 2	8080 8900	448	1 1	6464 10279	266 540
43262	9 1	1	6380		294	1954	1	6380	4.0	294						
43529		1	4940		224	1947	1	4940	4.0	229						
43575	9 11	∠8	7733	5.2	404	1952	3	7230	5.3	382						

TABLE 15.--DAUGHTLK-AVERAGE OF SIRES IN SCRUICL IN ARTIFICIAL BREEDING ORGANIZATIONS--CROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE OF SIRE

VERMONT

	DAUGHTEK	AVERAGE	0Y 511	₹E		R	ECOKU AVE	RAGE I	Y SIK	E BY	FRESHENING	YEAR				
SIKE NO.	OAUGHTERS	RECURDS NO.		TLST PLT.		FKLSH YEAK	RECORUS NO.		TLST PCT.		305-DAY C RECURDS NO.		FAI	YLARLY H RECORDS NO.		FAT
						1953 1954 1955 1956 1957	JERS 4 5 7 6 3		5.2 5.0	465 427 414 305 342						
43596	3 3	9	7050	5.3	367	1951 1952 1953 1954 1955 1956	2 1 1 2 1 2	6315 6530 6770 8445 7180 8105	5.8 5.3 5.9 5.0 5.8 4.3	365 360 398 417 413 349						
43687	2 2	2	8260	4.8	390	1955 1957	1	9360 7160	4.3	401 378						
45771	I 93	217	7278	5.2	373	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 5 19 25 47 50 38 19 13 2	8085 7800 7189 7266 7498 7141 7415 6917 6925 9070 6400 1070	5.1 5.5	418 378 371 379 393 363 383 371 353 498 328 48	1	8080 8470 8990	387 374 413	1	6039 7325 8884 9450	300 368 391 411
44110	7 27	55	7188	5.2	367	1950 1951 1952 1953 1954 1955 1956 1957	1 3 8 12 12 12 9 6 2 2	3160 8113 7590 7895 6912 6911 6712 9355 6620	5.2 5.2 5.2 5.3 5.3	163 406 395 401 364 365 366 483 294	ı	7600	367	ı	6954	344
44 11 9·	0 2	12	6661	5.7	385	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 1 2 2 1 1 1	5070 7215 8600 6875 6465 4730 7520 8670 7400	5.8 5.8 5.9 5.0 5.5	280 426 523 402 380 235 415 562 412						
44216	7 ц	11	6279	4.7	296	1951 1952 1953 1954 1955 1956	1 1 1 2 3 2	7440 7260 7830 7075 5833 6840 5630	4.7 4.7 4.0 4.5	371 338 368 320 260 334 347						
կ կ∠կ9	4 14	23	6614	5.6	369	1953 1954 1955 1956 1957	8 9 3 1 2	6693 6420 6240 9410 7400	5.6	381 359 347 493 383						
#### 6	8 11	22	8440	4.9	397	1954 1955 1956 1957 1958 1959	5 6 4 4 2	7124 7812 9070 10358 10040 17750	5.0 5.0 4.6 4.7	384 458 473 440 717	1	16770	578	_	6900 12284	
###32	8 5	10	7288	5.1	572	1952 1953 1954 1955 1957	3 2 1 3 1	8455 10740	5.4							
###68	8 51	96	7653	5.3	404	1953 1954 1955 1956 1957 1958 1959 1960	7 31 22 14 10 5 6	7626 7643 7420 7944 8355 8484 8482 7556	5.4 5.3 5.3 5.3 5.0 5.0	402 409 393 418 439 418 426 356	2 1 3 1	7645 6850 8330 8660	395 338 404 430	1 2 1 3	7107 7750 6845 7325	391 336
44517	4 18	54	8254	5.2	426	1952 1953 1954 1955	12 15 11	9280 8497 7851 7975	5.4 5.2 5.1	494 459 407 399	1	9150 7820	461 409	-1	8284	437
						1956 1957	5	7837 9446	5.4	421 482	1	10990	539	1	9080	453

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

UAUGHTER AVERAGE BY SIRL

	DAUGHTERS NO.			TEST PCT.			RLCORDS NO.				SOS-UAY NO.		FAT	YEARLY HE RECORDS NO.		F 4 T
						1958	JEKS I	8020	5.1	401	1	10450	525	1	10322	516
44602	1 1	5	7394	4.5	332	1948 1949 1950 1951 1952	1 1 1	5230 8260 9190 7510 6780	4.5	248 368 405 345 293						
446 88	3 4	13	8545	5.1	437	1947 1948 1949 1950 1951 1952 1953	3 1 2 1 1	9010 8505 8220 9055 9820 9240 10340	5.1 5.0 5.2	460 427 460 470 530 486 550						
44733	3 7	26	7944	5.0	391	1949 1950 1951 1952 1953 1954 1955 1956	1 2 3 5 4 4 3 2 2	8960 7365 8107 8208 8395 8678 8313 10320 10410	5.3 5.1 5.1 5.2 5.2 4.6 5.0	448 385 414 420 433 447 388 511 528	1 1 1 1 2	12030 6200 5570 7540 10200	617 384 345 424 511	2 1 2 2 2	8159 8055 8769 8742 8851	448 484 483
†† \$2††	¥ 55	140	7493	5.2	391	1952 1953 1954 1955 1956 1957 1958 1959 1960	4 33 40 24 15 11 3 8 2	6888 7978 7084 7796 7818 8311 5917 8403 9825	5.3 5.4 5.2 5.3 5.2 5.4	368 419 379 404 412 431 322 432 530	2 1	3270 10010		3 1	ರ 52 0 1002೪	4×5 542
44895	l 6	11	7046	4.9	340	1949 1950 1951 1952 1954 1959 1960	2 2 2 2 1 1	7455 6495 7185 7135 6760 9150 9860	4.9 5.0 5.1 4.2 4.9	338 317 348 354 283 450 481	!	8470 8620	431 445	}	9123 9984	
449292	2 3	5	7483	5.4	405	1956 1957 1958 1959 1960	1 1 1 1	7050 8440 6320 7630 8410	4.0 5.0	408 392 315 443 461	! !	7520 7660	423 393	1	6562	354
451154	9	13	6792	5.4	365	1954 1955 1956 1957 1958	2 4 3 3 1	6685 5633 7733 7920 7990	5.0	331 314 413 430 439	1	8540 6910 7220	433 365 398	}	6279 7107 6671	323 364 364
45404	9 1	1	7400	5.2	385	1958	1	7400	5.2	385						
45414	4 3	4	8838	5.4	475	1953 1954 1957	1 1 2	10250 7340 8860	5.2	563 384 476						
455676	5 56	93	7581	5.6	421	1954 1955 1956 1957 1958 1959	7 11 17 23 12 16 7	7633 7450	5.5	411 415 424 424 419 415 480	6 7 13 5		439 435	1 6 7 13	6845 9163 8368 8409 8873	466 422 442
45694	7 11	23	640 I	5.4	349	1952 1953 1954 1955 1956 1957	2 6 7 3 3	6097 7834 9160 8000	5.4 5.3 5.6 4.9	204 333 421 488 446 284 277						
45704	3 12	18	8624	5.2	442	1951 1952 1953 1955 1956 1957 1958 1959 1960	1 3 1 3 2 2 2 2 2 3	6470 9060 11940 8353 7345 8045 10140 10283 9670	4.9 5.3 5.3 5.1 5.2 5.8 5.0	325 439 636 447 372 415 986 908 531	3	3940 10220 9160 9220	529 473		10410 10590 9102	538
45725	8 3	7	8706	4.9	427	1951 1953 1954 1955 1756	 	8170 8850 8440	4.9 5.1 5.0 4.6	398 403 451 426 341						

V.C. R.MONI

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY ERECO,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	BY SI	KE		к	ECORO AVE	RAGE &	Y SIR	E BY	EKESHENING	YEAK				
SIRE Nu.	DAUGHTERS NO.			TEST PCT.		FRESH YEAR	KECURDS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
						1957 1958		9460 10560	5 · 1	436 408						
456159	3	5	6760	5.4	364	1954 1957 1960	1 1 1	8000 5890 6390	5.1 5.5 4.9	455 325 312	1	12550	564			
450311	161	261	75 50	5.3	395	1953 1954 1955 1956 1957 1958 1959	22 53 57 47 31 30 7	8310 6868 7462 7021 8003 8152 7887 7934	5.2 5.2 5.1 5.3 5.4 5.4 5.4	426 355 379 370 431 437 414 430	1 1 5 25 19 6	7360 9220 8112 8385 8342 8460	379 462 433 441 432 439	1 2 9 28 20 3	7804 7603 8543 8721 8809 3611	409 364 418 456 446 447
460497	23	36	7836	5.3	410	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 3 4 3 1 1 2 1 10 7	6790 5420 6553 7630 8400 7810 5775 8920 9012 8137 8240	5.7 5.5 5.3 5.1 5.9 5.0 4.8 5.4 5.4	388 301 347 398 427 400 328 426 464 421 421	ц. 8	10218 3074	526 412	4 7	10410 34 7 3	542 4/3
460676	3	3	6517	5.5	355	1959	1 2	8 7 50 5460	5.1 5.7	447 309	! 2	6200 7785	322 428	1 2	7630 3028	403 456
4607d9	04	101	6964	5.0	345	1953 1954 1955 1956 1957 1958 1959 1960	7 10 16 22 15 16 14	7271 6656 7064 7025 7777 7099 6497 6130	5.1 4.6 4.9 5.0 5.0 4.8 5.3	365 320 335 346 559 333 313 324	1 1 1 8 6	9410 9210 9250 6594 7663 7130	445 471 793 456 394 305	1 1 1 11 12	0605 0398 6027 8800 8547 7401	342 352 357 441 424 356
46 I 8 76	14	50	7668	5.6	425	1750 1751 1752 1753 1754 1755 1756 1757	4 8 11 7 6 4 5 1	6693 6875 7270 8126 7720 9055 9606 10530 14010	5.7 5.7 5.7 5.7 5.4 5.2 5.7 5.0 6.0	3/0 39/ 408 459 424 408 551 380 838	1 1	10650	647	i 1	99 7 4	546 578
463576	2	5	8779	5.7	498	1959 1960	4	8790 9000	5.9	518 401	!	8360 7 490	471 405	1	ช164 ช142	40 l 40 9
465030	ī	11	6731	5.2	341	1953 1954 1955 1956 1957	3 2 2 1	5963 7025 6020 6090 4060	5.4 5.1 5.9 5.5	296 358 354 332 219						
465443	44	65	6800	4.9	334	1954 1955 1956 1957 1958 1959 1960	/ 16 19 11 / 4	6626 6214 6893 7711 7713 8623 8176	5.1 4.9 4.9 3.0 4.1 4.6 4.7	340 307 336 384 307 395 367	1 2 1	8680 8395 9520 9780	437 423 481 499	2 2 4	9085 8824 9252	453 453 451
465661	7	22	7314	3.4	395	1952 1953 1954 1955 1956 1957 1958 1959	2 5 7 3 2 1 1	9850 7744 7840 7757 8460 9080 4750 5660	5.2 5.3 5.4 5.0 5.3 5.3 5.2 5.4	313 417 424 437 468 513 247 307	1	შაე0	446	ı	935 2	400
465966	I	4	8245	5.8	475	1950 1951 1953 1954		10530 8480 8640 5330	5.6 5.3 6.4	505 457 521 342						
465908	1	1	5450	5.6	319	1952	1	5450	5.	519						
465909	2	7	605/	5.3	324	1951 1952 1953 1954 1955 1756 1757	1 1 1 1	7900 7550 3760 6540 5960 5360 4980	5.0 5.0 5.4 4.3 5.7 5.4	434 420 197 355 256 307 271						
466643	6	7	9359	5.5	517	1760	7	9633	5.0	535	Ó	9633	560	4	9439	501
466748	13	26	7295	5.2	368	1950 1951	2	9595 7470	4. j 5. l	413 376						

TABLE 15.--BAJGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECURD AVERAGE BY SIRE BY FRESHENING YEAR

	DAGGITER	21611406	0. 3.				eguno ar				305-UAY (ONTEMP	. AV.	VI ARIV H	END AVE	ω Λ
	UAUGHTERS NO.					FRESH YLAR	KLCURUS NO.	MILK LB.	TEST PC1.	FAT LB.	RECURLOS	MILK	FAI	RECOROS	MILK	FAI
						1952 1953 1954 1955 1956	JEK:	7519 6730 7440 6145 6530	5.5	366 361 327 344 365						
467002	5 39	62	8075	5.3	423	1952 1953 1954 1955 1956 1957 1958 1959	5 5 9 10 10 8		5.5 5.6 5.3 5.1 5.0	⇒01 404	3 2 2 2 2 6	7645	436 436 502 504 466	2 2 3 5	7412 7467 8584 9581	414 3n9 435 470 436
46/010	37	61	6878	5.2	355	1953 1954 1955 1956 1957 1958 1959	5 12 14 16 9 3 2	6856 7318 7006 6668 7726 7210 7620	5.2 5.3 5.1		2 2 1	9375 9160 8590	497 400 458	2 2 1	9625 9750 9396	217
467036) d	21	7316	5.1	374	1952 1955 1954 1955 1956 1957 1958	2 5 4 2 2 2 2 3	7000 772 - 7745 10050 8870 9055 9523 6500	5 · 1		1	9990	513	1	11118	570
468045	5 2	2	4940	5.1	25d	1954 1955	1	2960 6920	4.0	137 379						
468054	23	62	7206	5.2	373	1951 1952 1953 1954 1955 1956	4 11 16 13 10 4		5.3 5.2 5.3							
471534	4 4	1	B018	0.0	400	1958 1959	ىد خ	7900 7773	4.8	375 410						
472114	خ خ	4	7515	5.2	38 9	1960	ц	7555	5.4	403	/	b625	462	2	9036	473
473399	13	20	7447	5.1	378	1954 1955 1956 1957 1958 1959	1 6 5 4 1	6100 7618 8016 6858 6430 8770	5.2	310 391 409 354 345 472	1	6490	316	1	6845	ەد3
472955	5 2	10	6005	5.6	33/	1951 1952 1953 1954 1955 1956	1 2 2 2 1 1	6220 6440 5380 5925 5360 4740 5410	5.1							
474643	5 5	d	7, 68	6.1	416	1951 1952 1953 1955 1956 1957 1958	1 1 1 1 1 2	4900 5760	6.2 6.2 5.9	304 354 463						
47554	7 1	1	5520	6.3	347	1958	1	5520	6.3	347						
475700) 13	36	7639	4.8	369	1954 1955 1956 1957 1958	9 10 10 4 4	7188 7404 7158 7435 8863	5.1 5.1 4.8 4.9 4.7	363 347 366 417	1	do 10	43∠	1	9014	432
47052	1 5	7	790∠	5.3	416	1958 1959 1960	2 4	8500 7623 10180	5.7 5.3 3.5	400 408 361	2 4	8400 8163 8590	447 431 419	2	8033 8570	454 453
47852	3 54	72	8611	5.1	եր եր եր	1956 1957 1953 1959 1960	5 11 19 30 7	8302 8046 9859 9047 9766	4.6 5.2 5.2 5.3	401 414 517 479 476	3 3	7270 10010 8645 9458	3do 580 451 4d9	1 3 2 1d 3	8012 8488 6268 6931 8640	3c 6 3y 1 284 437 393
478650	2	3	8035	5.8	462	1957 1958	1 2	7710 8360	5.3 5.7	444 480	1	83,0	425	1	7815	411
480∠8	7 в	17	8151	5.1	414	1958 1959 1960	6 9 2	7770 8752 9300	5.2 5.0 4.9	400 439 458		9540	524 535	2	8671 10025	447 542
48064	2 132	205	8848	5.0	430	1951	1	11040		459						

93

TABLE 15.---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

\$1ĸē NO•	OAUGHTERS NO.	KECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY RECORDS NO.		FAT	YEARLY HE RECORDS NO.	MILK	
						1952 1953 1954 1955 1956 1957 1958 1959 1960	JERS 7 14 18 23 19 26 29 48 20	9377 9021 8337 7975	4.7 5.1 5.1 5.2 4.9 5.0 5.1	441 455 419 411 438 471 445 450 423	2 7 6 16 34 14	8054 8657 7874 8046 8425 8268	430 381 432 416 408 438 434	5 9 10 16 42 13	8268 8262 8636 8431 8038 8915 8549	401 376 417 433 404 445 430
48258	5 13	19	8141	5.0	409	1952 1953 1954 1955 1956 1957 1958 1959	1 2 2 1 3 1 4 4	8140 5685 6150 6750 8633 5570 8730 7285 9490	3.9 5.2 4.0 5.0 5.1 5.1 5.3 5.0	320 303 298 376 424 265 452 388 475	1 1 3 1	7500 10200 8040 9240	40 f 529 422 446	1 3 1 1 3	5537 5723 7121 5973 10410 8629 9102	282 312
48271	8 1	2	8065	5.4	435	1951 1952	3	7920 8210	4.7	374 495						
∠7د48	7 3	4	5588	5.0	292	1955 1956	2	6975 4425	5.3	373 215						
482990	8 6	15	7663	5.7	429	1953 1954 1955 1956 1957 1958 1959	2 5 3 2 1 1	8000 8636 7830 8645 6950 7570 4290	5.5 5.4 5.5 5.5 5.6 5.6	434 464 434 473 403 440 294	ı	9630	541	1	9439	5 58
48517	0 13	25	7438	4.8	359	1951 1952 1953 1954 1955 1956 1957	1 4 7 5 3	3920 7545 7765 6823 8568 7073 9340		232 302 406 330 412 275 412	1	7060	341			
48632	3 30	41	76 88	5.2	40∠	1956 1957 1958 1959 1960	2 4 18 15 2	7675 6475 8327 7894 7755	5.2 5.3 5.1 5.3 5.5	402 344 426 417 409	14 11 2	8036 7373 8435	440 391 427	16 12 1	6614 8531 6747	453 439 351
48704	6 2	2	6835	4.2	298	1959	2	6835	4.2	298	2	9935	400	2	947 8	416
48719	8 4	9	6933	5.3	370	1951 1952 1953 1954 1955 1956	1 2 1 1 1 1 2	5030 7160 7650 7270 7320 5870 6440	5.0 5.2 5.1 5.0 4.9 4.8 5.5	252 373 389 366 360 284 355	۷	1245	392	2	7609	399
48818	2 11	18	7876	5.1	400	1952 1953 1954 1958 1959 1960	1 1 5 8 2	7220 7890 7780 9090 6800 7350	4.6 4.7 4.8 5.3 5.4	349 374 372 499 350 392	2 6	87o5 76o2	466 385	2 7	8873 8243	486 418
48828	7 14	36	7511	5.2	388	1953 1954 1955 1956 1957 1958 1959	5 8 9 6 6	H946	5.0	431	 	9360 9130	481 466	ì	9069 0561	
49052	9 5	3	8130	5.3	431	1959	3	8130	5.3	431	۷	8010	428	2	6754	365
49086	0 2	5	7118	5.6	389	1953 1954 1956 1957	2 1 1 1	6875 6150 8510 9230	5.0	359 446						
49172	5 16	26	7231	5.6	403	1955 1956 1957 1958 1959 1960	1 6 1 6 7	8810 7519	5.1 5.9	302 484 494 451	5 7 3	8104 7903 7453	449	5 6 3	7663 8203 8251	473
49216	0 59	72	8543	5.1	433	195 <i>1</i> 1958 1959 1960	10 16 35 11	8276 8649	4.9 5.1 5.1 5.1	420 442	1 9 27 9		462 428	1 9 31 5	8597	469 442
49235	3 13	28	7239	5.5	397	1951 1952 1953	1 5 7	7010	5.7 5.6	40∠						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	OADOMEN.		0. 32.			.,	2000	E A GE	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
SIRE NO.	DAUGHTERS NO.	RECUROS NU.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		305-DAY C RECURUS NO.		FAT	YLARLY H RECORDS NO.	MILK	
						1954 1955 1956 1957 1958	JER 3 3 3 3 3	7030 8740 8747 7477 7253	5.8 5.6 5.3 5.4 5.5	406 490 465 406 400	1	7860 7600	416 397	}	7445 9330	3 4 3 485
495230	0 I	3	6853	5.8	398	1953 1955	1 2	7230 6665	5.9 5.8	426 384						
495453	3 62	93	7146	5.4	383	1955 1956 1957 1958 1959 1960	7 31 28 11 13 3	6477 7055 7439 8094 7644 8160	5.8 5.3 5.4 5.5 5.2 5.3	559 572 404 444 391 437	1 2 2 1 8 3	9550 7030 7200 3000 7715 8397	426 378 375 436 405 433	1 3 5 2 11	16671 8099 7711 6082 7869 8840	532 375 356 273 373 433
49594	3 81	101	7548	÷.4	404	1955 1956 1957 1958 1959 1960	3 6 17 29 40 6	6947 6733 7835 8113 7973 6038	5.2 5.3 5.3 5.3 5.3	434 355 429 431 433 309	11 50 3	7929 3312 5737	421 437 428	3 17 31 5	10250 8424 6657 8925	475 457 444 445
49598	7 8	21	7556	5.0	377	1953 1954 1955 1956 1957 1958	2 8 5 3 2	8470 7116 8056 8660 8235 8720	5.1 5.4 5.2 5.1 5.3	452 558 431 447 420 462	 	7020 6410 6110 8350	384 350 335 452	1	6936 9419 8651 9254 9330	479 500 457 436 477
492489	9 10	23	7384	4.9	360	1951 1952 1953 1954 1955 1956	4 5 5 3 2 1	7735 7420 7230 6990 8960 7075 9550	4.9 4.8 5.0 5.0 4.9 5.0 4.6	3/4 358 356 348 43/ 355 443						
496820	0 18	57	7508	5.2	391	1958 1959 1960	18 14 5	7572 7404 7614	5.0 5.5 5.4	376 408 599	.5 14 14	8207 7510 8665	453 408 468	3 7 4	8284 7874 8614	44+ 463 487
496829	9 18	22	6766	5.5	375	1958 1959 1960	4 12 6	7393 7250 6345	5.7 5.0 5.3	418 404 350	14 1 1 14	8740 7883 7130	462 410 374	12 6	8706 8130 9607	460 4. 6 4c4
497516	5 5	8	9348	5.3	493	1958 1959 1960	14 2 2	10268 8180 10785	5.1 5.4 5.2	519 446 555	3 2 2	835 7 9260 9800	445 490 513	4 2 2	8257 8651 10061	457 461 578
497599	9 11	19	7951	5•2	412	1957 1958 1959 1960	1 6 9 3	8920 9707 6896 10020	5.5 5.0 5.0	490 492 345 570	3 4 2	9033 1535 9595	519 391 544	2 5 1	9352 8160 9472	
49853	1 10	14	8514	5.7	48 I	1953 1954 1957 1958 1959 1960	2 2 2 2 4	8595 7735 7895 7245 8580 9675	6.0 6.0 5.8 5.9 5.5 5.4	514 460 443 421 483 519	3 2	7590 9710	400 475	3 2	6542 9810	44명 4급3
502114	4 12	16	8469	5.3	450	1958 1959 1960	3 11 2	8187 8926 7395	5.1 5.4 5.1	419 487 358	3 1	₹004 7000	487 309	1 5 2	7249 9409 9331	37.5 513 469
503551	4 12	21	7443	5+2	388	1954 1955 1956 1957 1958 1959 1960	3 3 2 2 5 7	8445 8750 7923	5.2 4.7 5.1 5.2 5.3 5.3	399 381 428 451 418 396 328	2	11320 11430 8750 8344 3470	641 629 465 439 412	1 1 1 2 3	10181 10137 10475 9211 8802 6942	473
50445	5 2	4	5369	5.3	284	1957 1958	2 2	5735 6300	5.4	305 327	2 1	7735 7410	378 386	2	6845	368
50505	7 2	5	7061	5.7	400	1958 1959 1960	3 I I	7360 7190	5.9 5.6 5.6	433 402 331	2	7380 9180 6570	365 478 353	2 3 1	7248 9636 8769	383 505 365
50554	9 8	10	¥795	5.1	496	1959 1960	ย 2	9375 9975	5.1	471 559	ц 2	9445 8275	495 441	5 2	8870 8508	470 452
50669	7 27	44	8575	5.2	444	1958 1959 1960	9 22 13	8533 9098 8264	5.0 5.1 5.6	427 463 465	2 11 11	8885 8483 8373	497 451 452	2 14 11	8824 6522 8631	476 442 458
50817	6 5	5	9143	4.8	440	1959 1960	ц 1	9735 6800	4.7 5.4	458 365	4	8075 7590	424	4	8851 8142	468 469
50840	1 4	4	7540	5.6	406	1959 1960	ا خ	6310 7950	5.8 5.5	364 420	1 2	10000 8030	521 482	1 2	10279 9172	530 495

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

STRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAI LB.	FRESH YEAR	NO.	LB.	TEST PCT.	FAT LB.	SOS-OAY (RECORDS	CONTEMP MILK Ld.	FAT	YEARLY HE RECORDS NO.		FAT
							JLR:									
50985	5 57	108	B 391	5.3	446	1952 1953 1954 1955 1956 1957 1958	4 14 13 8 11 8	7245 7869 7469 8218 7989 7594 9817	5.7 5.6 5.4 5.4 5.4	410 453 417 435 433 409 489	3	10273	570	 	9974 4851 9320	546 263 517
						1959 1960	27 10	8734 9134	5.4	472 470	13	8444 88 76	441 442	16	8425 9420	421 459
51032	2 11	16	84/4	5.4	455	1958 1959 1960	5 9 2	7478 8653 9635	5.8 5.4 5.5	427 464 525	5 4 2	9200 9078 8150	507 512 437	3 4 2	8989 9238 8328	407 527 448
51047	7 11	15	7609	5.0	381	1956 1957 1958 1959 1960	1 3 7 3 1	6410 8270 7414 7343 7600	5.0 4.9 4.9 4.9 6.0	323 403 365 360 459	4 3 1	8795 7700 8210	446 379 435	ų 3	8033 7637	
51293	1 1	1	6770	6.0	404	1958	1	6770	6.0	404						
51498	0 35	40	8241	5.4	447	1958 1959 1960	6 25 9	7637 8333 8866	5.5	397 454 482	2 17 5	8341 8341 8806	418 437 455	18 3	7167 8393 9229	442
51597	3 4	5	7270	5.2	376	1954 1955 1956 1957	2 1 1 1	6190 9940 9740 6860	5.3 4.9 5.0 5.2	326 486 492 360						
51708	0 5	11	7128	5.1	362	1956 1957 1958 1959 1960	1 1 2 6 1	5450 7650 6690 7233 6570	5.0 5.2 5.3 5.2 4.6	271 396 357 372 316	 4 	/600 8305 1000	393 42 <i>1</i> 536	2 4 1	6932 8745 10026	3 7 2 453 542
51708	1 2	2	4930	5.1	268	1956 1960	1	2380 7480	4.5 5.7	107 428	1	7480	428	1	7041	387
51708	2 5	6	10645	5.1	493	1957 1958 1959	1 1 3	7100 10490 6830	5.5 5.1 5.1	393 530 346	1 2	8600 6175	505 336	1	6722	356
51829	1 10	17	7160	5.1	367	1957 1958 1959 1960	3 6 6 2	8400 8063 6935 5800	4.9 5.1 5.2 5.3	409 411 365 310	1 2 3 2	10560 6040 7177 7570	488 303 369 360	2 3 5 2	7892 7826 7896 8426	360 401 376 417
51924	4 8	В	8044	5.6	452	1959 1960	5 3	9044 6377	5.7 5.4	515 348	3 2	9233 / 490	488 402	3 3	9512 7776	510 393
51981	2 2	4	6319	5.2	325	1955 1956 1957	2 	6020 6120 6790	5.2 5.2 5.1	309 319 346						
52069	0 1	1	1380	5.7	421	1959	1	7380	5.7	421						
52117	5 33	36	8050	5.4	436	1957 1958 1959 1960	2 6 24 4	6920 8872 8371 6153	5.4 5.3 5.4 5.5	3/4 470 454 340	1 6 20 3	8880 8555 8718 8023	467 452 459 408	1 6 20 2	7041 8389 9097 6028	367 444 467 363
52201	4 3	3	5253	5.4	270	1958 1959	1 2	3060 6350	6.3 5.0	191 319	1	6260	317	1	7118	36.
52249	9 28	30	9184	5.2	477	1959 1960	24 6	9441 8980	5.2 5.2	467 465	16	8298 7 828	438 409	17	Ե 484 В690	446 451
52436	B 15	19	6930	5+1	346	1954 1955 1956 1957 1958	0 4 3 3 3	6050 1137 7277		3/4 3∠4 353 380 284	}	6500 7090	328 345	1	5657 6845	2/8 336
52907	8 28	30	8193	5.1	418	1958 1959 1960	3 22 5	6063 8991 5712	5.3 5.2 4.8	316 464 209	2 17 4	8075 8676 6775	436 450 340	2 18 4	8785 9071 9826	465 477 443
53411	9 1	2	7080	5.8	403	1959	2	7080	5.8	403	2	1095	376	2	6813	366
53436	6 3	5	8995	5.0	457	1956 1957 1958	2 1 2	8390 6980 9540	4. Ե 5. 1 5. 1	404 358 486	1	13850	691	1	699B	347 418
53438	31 2	6	8962	6.0	540	1959 1960	4 2	9460 9950	6.5	597 654	1	9600 10010	522 530	1	9625 10028	535 542
53550)4 4	6	5643	5.9	339	1957 1958	1 2	6070 5440		335 314	1	8/10	336	1	9014	365

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING GRGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENIAG--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTEKS	KECORDS NO.		TEST PCT.		FRESH YEAR	NECOROS NO.	MILK L8.		FAT			FAT	YEARLY HE RECORDS NO.		E 5 T
						1959 1960	JER 2 1	5EY 6340 4320		409 233	2	7870 12850	3/3 580	1	8393	335
53560	7 4	4	8263	5.1	417	1959 1960	3 1	8207 8430	5.0 5.4	403 459	ر ا	8033 7 910	401 390	3	1000	445
53682	6 9	12	8367	5.0	415	1957 1958 1959 1960	2 4 5 1	6420 9485 8448 10920	4.9 5.0	332 462 422 457] 4 5 1	7630 8315 8578 9140	422 451 441 471	1 4 5 1	6671 9330 9276 9450	364 479 430 476
53766	6 3	3	7407	5.3	391	1959 1960	1 2	8460 6880	5.0	422 376	۷	6865	365	2	7516	353
54012	7 30	45	8109	5.3	432	1957 1958 1959 1960	6 14 23 2	7733 8772 8207 8120	5.3 5.4	461 461 440 438	10 18 2	7518 8627 8262 7275	410 459 442 386	4 10 17 2	7658 8229 8684 7734	
54290	8 2	3	7953	5.2	408	1958 1959 1960	1 1 1	/1/0 9370 8100	5.0	380 469 401	1	8510 8110	421 466	1	≠211	4/4
54664	8 5	6	8392	5.2	437	1958 1959	2 4	10050 7978	4.7 5.4	475 428	1 4	7360 6670	383 344	2	6932 7281	312 372
54777.	3 5	5	8318	5.1	421	1959 1960	4 1	8785 6450	5.0 5.5	436 358	4	9358 8380	494 412	4	9960	5, 0
54980	5 9	13	8528	5.3	453	1958 1959 1960	7 5 1	8416 6550	5.3	457 448 331	ب خ ا	3903 8203 8080	474 425 410	4 3	89 7 3 6 93 4	466 461
55072	2 1	łş	8170	5.3	431	1958 1959	3 1	8283 7830	5.2 5.7	434 444	1	7420	358	1	6464	337
55072	3 1	1	7420	5.1	376	1959	1	7420	5-1	<i>5</i> 76	1	6510	350	1	6965	316
55235.	2 32	56	9083	5.4	492	1957 1958 1959 1960	3 16 29 8	8543 9001 9681 7934		446 501 523 431	3 8 10	8568 7053 8060	442 467 488 428	3 9 16	7067 8149 9146 8642	
55350	7 1	2	8005	5.4	434	1958 1959	1	8510 7500	5.3 5.5	454 413	1	7270 6510	379 348	1	6943 6769	37 c 365
55482	2 5	6	7388	5.3	387	1958 1959	3 3		6.4 4.6	428 344	2 2	100 10 8595	947 428	1 2	7336 8203	
55518	rt 14.0	68	8152	4.9	401	1957 1958 1959 1960	9 22 32 5	7648 8154 8583 8448	5. I	377 410 426 395	2 10 23 5	9065 8847 8420 8740	452 467 431 430	2 11 28 5	8142 9366 9123 8450	466 450
55631	1 1	2	9450	6.6	627	1959	2	9450	6.6	627						
55726	7 8	11	6115	5.1	308	1957 1958 1959 1960	1 1 6 3	3230 5150 7825 5730	5.2 4.7	160 269 364 274	1 14 2	6240 7908 6345	319 394 325	1 4 2	7543 7772 6856	
55726	8 14	19	6431	5.6	351	1957 1958 1959 1960	1 1 12 5	6810 6900 6184 5734	5.7 5.7 5.7 5.6	483 391 345 319	1 1 8 3	10710 7680 7113 7650	512 392 368 381	1 1 8 2	9080 7761 7602 7091	453 390 394 370
55830	0 1	1	1890	5.3	410	1960	1	7890	5.3	418	1	8820	413			
56130	14 14	6	8178	5.6	459	1958 1959	2 4	8490 8196	0.2 5.6	524 458	1	8520 9665	442 490	2 4	904 7 9503	
56148	7 1	1	6650	4.8	321	1959	1	6650	4.6	321	1	6910	340	1	8720	4/8
56148	8 1	1	8140	5.2	425	1959	1	8140	5.2	425	1	1300	372	1	0110	467
56341	ކ Ţ	4	7530	5.6	407	1958 1959	ا خ	9120 7000	5.2 5.7	471 386	2	8210	384	2	o5 13	450
56365	8 4	4	7868	5.6	432	1959	Ł	7868	5.0	432	24	7638	403	4	7971	417
56822	9 1	1	7560	5.7	433	1959	1	7560	5.1	433						
57278	9 2	2	16460	5.2	703	1959	2	16460	5.2	703	2	8815	465	2	9832	517

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

	DAUGHTER	AVERAGE	BY SIF	RE		R	CORO AVI	ERAGE 8	Y 51R	E BY	FRESHENING	Y⊨A⊰				
SIKE ND.	DAUGHTERS ND.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCI.		SOS-DAY O RECORDS NO.		FAT	YEARLY HE RECORDS NO.	MILK LB.	FAI
							BROWN 5	SZIWZ								
3804	9 4	9	8537	3.9	332	1954 1955 1956 1957 1958	 3 3 	5510 6660 8687 8943 8380	4.3 4.3 3.8 4.2 3.7	235 289 327 373 314						
3959	3 3	5	10508	4.2	436	1948 1949 1953 1958	1 1 1 2	8040 9010 12200 10800	4.1 4.1 4.1	329 396 300 446						
454 1	7 11	20	10 186	4.1	414	1953 1954 1955 1956 1957 1958 1959	2 2 5 5 3 1 2	9195 8895 10800 9508 11387 7590 11790	4.1 4.2 4.0 4.0 4.0 3.5 4.2	371 372 433 376 462 268 497	1 1 2	6910 11310 10320	378 458 443	1 1 1 2	7848 8393 9080 9232	322 340 350 383
5009	2 5	9	10192	4 = ()	409	1953 1954 1955	3 4 2	8143 12360 10695	3.9 4.0 3.9	319 492 406						
5981	1 2	2	9725	4.2	410	1953 1955	1	11050 8400	4.2 4.2	467 353						
6156	4 1	3	10833	4.4	478	1953 1954 1956	1 1	11580 9890 11030	4.5 4.5 4.5	494 441 500						
6156	7 3	13	9877	4.5	44	1950 1951 1952 1953 1954 1955 1956 1957	1 2 1 2 3 1 1 1	10620 9380 11660 9370 9537 10370 11770 11460 12650	4.3 4.7 4.6 4.5 4.3 4.4 5.2 4.7	462 397 547 423 428 441 518 597 592	1 1 1 1 1 1	11320 13000 10750 10000 9870 12270 13430	445 526 434 410 421 538 604	1 1 1 1	8426 9298 10246 9352 9810	375 411 445 402 425
6542	1 7	17	11143	4.0	449	1953 1954 1955 1956 1957 1958	3 1 3 2 4	12420 9920 10923 9500 10180 11555	3.9 4.0 4.0 4.2 4.0 4.1	489 399 446 375 405 474	ì	11340	486	1	11096	471
6835	4 10	15	10674	4.2	449	1955 1958 1959 1960	1 6 7 1	11140 9875 10926 16060	4.1 4.2 4.2 4.3	459 408 467 689	1 2	12970 12265	582 515	1 2	10922 11456	446 517
7074	7 16	32	10385	4.0	416	1954 1955 1956 1957 1958 1959	1 2 4 8 6 9 2	10190 11675 9108 10875 10998 10062 10965	3.9	435 463 350 421 444 389 417	1 2	9590 10390	406 428	1 2	6629 9723	360 593
7259	4 1	1	11650	4.0	474	1960	1	11850	4.0	474	1	9280	375	1	9429	389
7406	2 7	11	10874	4.1	442	1955 1956 1957 1958 1959 1960	1 2 3 3 1 1	7590 10240 11990 12103 12070 9990	4.1 4.2 3.8	350 416 491 515 458 373		115o0 7190		;	9178 5712	
7605	9 3	14	13148	4.5	588	1953 1954 1955 1958	1 1 1 1	8270 7560 14990 16540	4.2	375 350 625 776						
7620	2 11	17	9560	4.5	429	1956 1957 1958 1959 1960	կ 4 4 1	9383 11035 10215 10240 8430	4.4	413 465 452 476 325	1	9560 11950	413			
7868	8 1	1	11610	4.3	497	1957	1	11610	4.5	497						
8240	5 7	10	8851	4.2	372	1954 1955 1958 1959 1960	1 2 2 4 1	9490 8035 8720 9020 8990	4.0	426 327 350 385 3/6	2 4 1	10350 10125 10270	410	2 4 1		350 393 339
8613	9 2	3	9355	4.5	413	1957 1958	1 2	10990 9215		490 406	1	9540	375	1	9080	350
8767	7 9	14	11762	4.3	506	1955	1	4660	3.9	181						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEVING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

\$1 KE	DAUGHTERS NO.	KECORDS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.	FAT LB.	SOS-DAY (KECURDS		FAT	YEARLY HE RICOROS NO.		FAT
						1957 1958 1959 1960	BROWN 1 3 8 1	SWISS 10580 13467 12291 16450	5.4 4.3 4.2 3.6	568 573 509 593	2	12170	517	2 1	9178 10344	409 440
89612	2 8	11	10266	4.3	440	1953 1954 1955 1959 1960	1 2 2 5 1	8630 7225 9955 11004 7920	4.4 4.3 4.3	380 315 421 477 348	14 B	9718 7870	413 335	4 1	9772 9069	411 375
89614	, 14	11	10277	4.2	432	1954 1955 1956 1957 1958 1959	2 3 3 1 1 1	11190 9087 11143 11610 10730 10990	4.2 4.3 4.2 4.1 4.5 4.5	455 387 460 471 466 499	1 1 1	10590 9380 10620 11730	431 386 434 513	1 1 1	9701 9952 10410	397 396 433
90000) 1	1	10360	4.2	435	1959	1	10360	4.2	435						
9 12 31	4 6	В	10801	4.1	447	1957 1958 1959 1960	1 1 5 1	10450 11330 11288 8820	3.8 3.7 4.2 4.0	399 420 480 351	ц 1	9850 7750	406 335	14 1	9889 9069	414 375
91856	5 2	2	9455	3.9	362	1958	2	9455	3.9	362				2	10453	438
93771	11	15	9675	4 - 4	424	1956 1957 1958 1959	1 1 8 5	6010 6980 10228 11376	4.7 4.3 4.4 4.4	285 297 450 492	2 2	13275 13630	553 584	3 2	12099 13544	507 578
94392	2 8	9	9620	4.1	402	1956 1957 1959	4 2 3	7790 8890 12427	3.9 3.9 4.5	300 344 563						
94606	5	6	10245	4.2	431	1958 1959 1960	2 3 1	9725 11283 7570	4.4 4.2 4.1	427 473 308	1 2 1	8950 11995 7910	397 496 340	1 3 1	9080 11031 9352	350 435 388
94665	5 2	4	12202	4.6	553	1953 1955 1956 1957) 	12120 11060 13130 12660	4.6 4.2 4.5 4.7	552 467 593 601	1 1 1	13370 10910 11220	494 449 479	1 1	9701 9952 10410	397 396 433
99438	3 2	2	9440	4.2	392	1957 1958	1	6680 12200	4.2 4.1	263 500						
1005 13	3 3	4	9063	4.1	357	1958 1959 1960	1 2 1	11030 8195 10570	3.7 4.3 3.8	403 336 397	1 1 1	10020 6520 9420	405 290 384	1 1	9080 6235 9429	350 266 339
100544	1	1	10270	3.8	395	1960	1	10270	3.8	395	1	13140	557	1	11031	441
105570	5	9	9611	4.3	412	1956 1957 1958 1960	2 4 2	9810 9543 11670 12660		415 411 497 520				,	10769	448
108905	5 7	10	9015	4.0	364	1957 1958 1959 1960	1 5 2 2	5000 8814 10980 10525	4.6	232 349 423 457	2 1	9580 8950 7780	407 372 330	2	8829 9167 9123	360 379 376
113594	14	15	11026	4.2	462	1956 1957 1958 1959	1 1 3 6	13060 9660 10590 10721	3.9 5.0 4.2 4.2	516 480 439 449) 5	9530 10750	408 439	1 6	9102 10528	38B 447
117125	5 2	2	11600	h 5	631	1960 1958	2	11895		497	1	8900	370	1	9123	376
111123		3	11600	4.3	331	1959	2	11615	4.5	535	1	12600	529	1	13636	582
120226		1			314	1959	1	7110		314	1	6120	274	1	6235	266
120448	3 1	2	10560	4.5	477	1959 1960	1	11100 10020			1	9390 7180	40 I 304	1	9102 5712	
122766	5 2	2	6750	4.1	277	1959 1960	1	5360 8140	4.0 4.2	215 338				1	13472	580
124609	9 4	4	12075	4.1	497	1959 1960	1 3	13850 11483			1	14370	583	2	11451	455

TABLE 15.--OAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS	RECOROS NO.	MILK LB.			FRESH YEAR	RECORDS NO.		 FAT LB.	305-DAY (RECORDS NO.	ONT_MP MILK Lb.	FAT	YLARLY HE KECOKDS NO.	MILK	
							M. 2H0	RTHORN							
2486947	2	3	10500	4.0	405	1956 1957 1958	1 1 1	11680 13520 8400	471	1	11540 118 7 0	446 462	1	8404 9516	

MASSACHUSETTS 100

TABLE IS.--DAUGHTUR-AVERAGE OF SIRES IN SURVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	DAUGHTER	AVERAGE	84 21F	(E		К	ECORD AV	LKAGE I	34 21K	E BT	FKESHENING	TEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAK	RECORDS NO.		TEST PCT.		SOS-DAY (RECORUS NO.	MILK Lb.	FAT	YEARLY HE RECORDS NO.	MILK LB.	FAT
							AYRS	HIRE								
4646	3 1	2	11490	4.4	504	1948 1949		11510 11470		538 469						
4650	2 I	1	6350	4.7	300	1949	1	6350	4.7	300						
5047	0 1	14	10493	4.1	425	1947 1948 1949 1950	1 1 1	10600 11600 11950 7820	3.9 4.0	430 456 472 342						
5239	lş lş	5	9334	4.2	390	1949 1950 1952 1953 1955	1 1 1 1	10550 8390	4.2 4.4	395 445 351 355 368	1	8730 6460 7660	38 I 273 305	1	8066 7238	
5503	3 15	37	8371	4.2	351	1949 1950 1951 1952 1953 1954 1955 1956	1 11 8 7 4 3 1	8872 7824 9220 8488 7927	4.2 4.1 4.2 4.0 4.1	348 378 326 376 355 323 319 448 507	1 1 2 2 2 2 1 1	10080 8490 7370 10755 11110	323 399 358 304 435 418 414 525	2 2 1 1	7919 8219 9418 10617 12982	340 372 436
5729	9 1	2	9365	4.1	383	1948 1950	1		4.0 4.2	346 420						
5733	8 1	5	7832	4.7	370	1951 1952 1953 1954 1955	1 1 1 1	7400 9390 6440	5.0 4.8 4.9 4.2	407 354 461 270 359	1 1 1 1	8550. 9740 9320 9200 8380	386 375 378	1 1	9330 8796 8938	358
5404	7 16	39	9327	4.0	376	1948 1949 1950 1951 1952 1953 1954	1 7 11 7 7 3 2	10669 8398	4.1 3.9 4.1 4.1 3.8 4.3	394 337 419 343 282 276 500 478	4 4 5 7 3 2		410 367 372	7 3 1	8829 9541 9668	386
6092	0					1953	1	6510	4.4	289						
6104	6 10	32	8688	4.1	353	1950 1951 1952 1953 1954 1955 1956 1957 1959	5 7 5 3 4 2 1	8447 9682 8143 8383 8525	4.1	349 372		7650	365 312 298 360 344	2 3 4 2 1	8230 8713 8505 10241 11183 10213	360 352 429 460
6223	3 22	57	8863	4.1	363	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 3 10 13 10 8 4 2 3	9656 9428 9450 13070 9833	4.4 4.2 4.2 4.2 4.1	360 386 366 383 403 391 379 520 357 357	1 3 10 8 7 3 1 2 3	9990 9483 9828 9733 9294 10307 13400 11095 11027	377 417 538 407	3 1	9294 9464 10117 10032 13342 11625 11074	388 412 410 548 449
6258	5 3	10	9425	4.1	387	1950 1951 1952 1953 1954 1955	1 3 2 2 1 1	9870 8635 8140	4+1 4+1 4+2 4+2 3+8 3+9	422 415 363						
6261	3 22	43	8535	4.2	360	1953 1954 1955 1956 1957 1958 1959	/ 13 10 9 2 1	8341 7923 8866 7915 6430	4.3 4.2 4.1 4.2 4.1 3.7 4.3		0 10 9 6 2 1		372 397 400 423 502		9985 8976 9110 9579 9914 10715 9723	371 386 395 419 475
6314	4 26	60	8801	4.3	376	1950 1951 1952 1953 1954 1955	4 12 17 9 5 4	8346 8963 9094	4.2		6 9 4 4	10108 9614 10042 9328 9833	399 417 397	8 4 4	9264 9742 9407	415

MASSACHUSLITS 101

TABLE 15.--OAUGHTZK-A-WAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING GROANIZATIONS--OROUPED BY BREEL,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAOUHTER AVERAGE BY SIRE

SIKL NU.	DAUGHTEKS	NO.		TEST PCT.	FAI LB.	FRESH YEAR	RECURUS		TEST PCT.	FAT LB.	SECURDS NO.			YLAKLY HA		EAT
						1956 1958	AYK 5: 4 2	9303 10295	4.3 4.4	40 1 444	ц 1	10043 9860	447	4	10153	435 4 7 5
63141		300	9600	4.2	403	1953 1954 1955 1956 1957 1958 1959 1960	4 45 49 37 50 73 10	10043 9174 9518 10327 10548 10436 9684 10077	4 · 2 4 · 1 4 · 1 4 · 1 4 · 1 4 · 2 4 · 2	429 373 390 420 434 433 407 424	5 20 39 46 50 49 72	10017 9469 9365 9991 10595 10092 9456 9710	413 387 379 411 435 424 396 413	2 19 38 34 31 49 71 8	9211 9501 9107 9756 10565 10360 9768 9294	302 371 375 400 454 429 405 390
634 17		1	12520	4 - 1	514	1949	. '	12520	4.1	514						
63426	36	19	9135	4.2	382	1952 1953 1954 1955 1956 1957 1958 1959	12 18 12 16 14 4 1	9794 8889 8937 9242 9122 9820 10770 10466 12020	4.1 4.4 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	404 374 386 374 380 415 400 400 340	7 15 12 14 11 4 1	10451 9197 9350 8766 10057 3648 10070 9960	417 375 394 363 412 598 421 395 489	14 16 13 10 4 1	9275 9713 8720 10043 9990 10715 9450	573 375 360 410 41 475 579
64885	, J	24	7349	4.1	301	1951 1952 1953 1954 1955 1956	4 7 3 3 1	6333 8151 6924 8276 7523 10330 12040	4.1 4.2 4.1 4.0 4.0 4.0	260 335 290 357 304 416 514	2 4 3 3 1	11025 9192 8073 9403 0057 13000 13320	459 376 360 372 320 518 516	3 2 2 1 1	8358 10312 7227 11500 12579	334 478 275 457 431
65366) 1	1	7610	4.0	305	1948	1	1610	4.0	د03						
65548	3 3	13	9817	4.2	409	1950 1951 1952 1953 1954 1955	2 2 2 3 2 1	10250 9720 10095 10253 8785 5750 8630	4.5 4.3 4.1 4.3 4.2 3.9	457 417 420 415 377 242 335	2 2 3 2 1	9320 11475 10510 9440 8955 9820 8430	379 439 411 35 - 360 39 y 324	3 2 1 1	10053 9341 9200 8611	391 372 370 354
67174	10	19	9006	3.9	351	1951 1952 1953 1954 1955 1960	1 3 3 2 1	9094 8474 9837 8870 8370 9580	3.9 3.8 3.6 3.0 3.9	354 325 300 336 326 366	2 3 3 2 1	8750 9047 9813 10540 10550	354 355 392 420 430	I 2 1	8393 9363 10235	336 375 411
68186	3 8	À	7554	4.3	321	1950 1951 1952 1953	2 5 3 1	8065 7277 8140 4910	4.3 4.2 4.5 4.2	342 304 369 204						
66331	1	1	11690	4.6	53b	1951	1	11690	4.6	538						
70151	1	1	5810	4.6	269	1953	1	5810	4.6	269	1	5840	247	1	5842	250
70259) 15	36	8769	4.3	370	1954 1955 1956 1957 1958 1959	9 10 7 5 2 3	8539 8470 9140 9086 8895 9473	4.5 4.5 4.3 4.0 4.0 4.0	382 377 397 385 404 403	10 7 5 2 3	9289 8674 9777 10454 10245 10280	390 360 405 435 413 437	7 9 0 5 2 3	9014 6865 9881 10313 10721 10261	340 365 400 437 451 410
76368	3 11	23	7245	4.3	307	1952 1953 1954 1955	2 8 8 5	8235 7726 6786 7742	4.3 4.3 4.3 4.2	349 330 265 319	1 7 8 5	8280 7223 7 363 7 892	34 H 30 f 32 d 32 d	7 8 4	3046 3134 7826	
70760) 13	32	8443	4.4	366	1952 1953 1954 1955 1956 1957	4 7 10 6 3 1	8813 9061 8457 8675 7430 10586 9400	4.2 4.5 4.4 4.3 4.5 3.9 4.0	372 407 567 575 531 415 380	4 7 10 0 3	8738 8406 8413 9135 8617 11160 10310	344 367 352 378 358 444 415	5 10 6 2 1	8513 8648 6735 10535 9178 10726	357 306 357 443 374 434
70975	5 3	6	9768	4.2	40 8	1947 1948 1949 1950	2 1 1 2	9530 8420 6680 9530	4.3 4.4 4.6 4.3	4 I 4 365 306 40 I						
7119	1 17	31	8534	4.0	330	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 6 11 5 5 1 1 1 1	10990 8565 8441 9458 8010 7810 8910 11990 10750 9490	3.8 4.0 4.0 3.8 4.0 4.1 3.8 3.9 4.0	420 339 332 566 321 330 362 455 421 376	2 5 3 1 1 1 1	9535 8853 9090 8300 8870 10730 10510 9620	405 359 350 357 337 378 440 435 386	4, 2, 1, 1, 1, 1,	9001 9222 6655 9429 11183 10824 10747	391 379 348 393 460 449 425
7176	3 21	66	8252	4.3	356	1950 1951	7	7500 8443	4.1	352 381	1	9450	394			

MASSAUHUSETTS 102

TABLE 15.--DAUGHTER-AVERAGE OF SINES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL L	AUGHTERS NO.	RECOROS		TLST PCT.	FAT LB.	FRESH YEAK	MO. KTCO402		TEST PCT.	FAT	305-DAY RECORDS NO.			YEARLY HE RECORDS HO.	RD AVE MILK LB.	FAT
						1952 1953 1954 1955 1956 1957	AYRSI 21 14 9 8 3 2	8507 7951 8856 8619 9333 10080	4.4 4.3 4.2 4.5 4.5 4.5	373 342 381 364 407 451 440	11 10 7 7 3 2	8760 8300 8767 9250 10647 11400 10560	363 339 355 381 432 469 460	8 6 6 2 1	8195 8671 9134 10148 10649 12655	347 352 376 423 464 491
72686	3	10	10055	i4 i4	433	1953 1954 1955 1956 1957 1958	1 1 2 3 2 1	13050 12100 8400 10053 11190 12480		535 481 577 436 466 563	1 1 2 3 4	8610 8930 10200 10100 12320 11440	394 408 425 441 505 468	1 1 2 3 2 1	8753 8731 10257 10366 11783 13058	425 420 446 446 538
73295	81	161	8848	4.1	36 3	1952 1953 1954 1955 1956 1957 1958 1959	7 27 52 40 13 8 9 4	8524 8932 8467 9135 9483 10050 11529 9858 10490	4.3 4.1 4.2 4.1 4.0 4.2 4.0 3.8 4.1	360 363 353 374 384 417 457 373 427	3 23 49 34 13 7 9 4	9800 9378 9449 9332 10065 10031 10517 10003 9640	412 385 389 383 413 399 435 417 394	21 42 33 12 7 9 4	9365 9165 9021 9606 10124 10332 9908 10464	383 376 370 405 414 421 406 427
74021	12	118	9374	4.0	377	1953 1954 1955 1956 1957 1958 1959	3 10 9 12 18 23 31	10653 9203 9541 9431 9897 9688 9670 8770	4.1 4.2 4.0 4.1	425 374 389 396 395 394 387 340	3 7 6 11 18 22 30	10207 9473 9150 9036 9352 10274 9856 1025	413 391 380 380 409 435 410 416	3 6 8 11 18 19 28 10	10355 9685 8931 8006 9643 10550 10126 10494	415 392 368 369 408 454 413 423
76613	84	204	9833	4.2	4 00	1952 1953 1954 1955 1956 1957 1958 1959 1960	4 35 50 41 22 20 17 13	11915 9321 9397 10214 10149 10872 10279 11736 9830	4.3 4.2 4.2 4.1 4.2 4.2 4.2 4.2	511 393 390 424 427 451 433 468 407	4 28 46 37 18 16 14 12 2	9253 8724 8943 9245 10453 10687 10313 10486 7175	395 362 375 387 427 454 432 441 375	24 40 34 16 15 13	8830 8909 9246 9801 10436 10807 10727	363 369 383 465 440 456 444 420
7 683 1	5	21	9360	4.5	414	1949 1950 1951 1952 1953 1954 1955	1 1 5 4 4 2 2 2	9800 10440 9710 9233 891d 7470 8525 9180	4.1 4.1 4.5 4.6 4.7 4.6 4.6	404 426 430 420 404 538 574 416	3 3 3 2 2 2	10670 10167 9447 9853 7245 10180 10140	444 423 333 401 372 422 424	4 2 2 2 2	10026 9734 10225 10601	423 373 424 445
78114	22	43	9057	4.0	363	1954 1955 1956 1957 1958 1959 1960	2 10 7 1 10 6	8750 9205 9534 9924 9787 9333 6740	4.4 4.1 4.0 3.9 4.0 4.0 3.8	387 384 383 386 388 374 257	2 10 7 7 10 6	9705 8573 9867 10166 9684 9447 15710	403 351 390 401 374 384 643	2 10 7 5 9 5	10050 8961 9742 10650 9945 9784 8694	302 357 394 415 401 406 351
7 y 1 B 6	3	5	B470	3.9	328	1956 1957 1958	2 1 2	8390 5750 9620	4.0 4.4 3.8	329 254 366	1	11960 9610	471 385	1	8949 10083	376 409
79374	1	1	17 160	4.4	753	1959	1	17160	4.4	753	1	12980	534	1	11936	497
86379	24	34	93ú l	4.1	385	1956 1957 1958 1959 1960	3 0 12 11 2		4.1 4.2 4.2 4.1 4.4	415 403 406 375 380	3 6 11 11 2	7957 10062 9912 7540 9295	412 426 426 398 377	5 5 11 11 2	9178 9867 10186 9645 9903	
B2620	5	5	9306	4 - 4	414	1959 1960	14		4.5		ц 1	101o5 8d50	421 361	4 1	10434 7881	437 308
B262B	9	12	9086	4.1	37 I	1955	Ž	7930			1	4320	413	1	8644	302
						1956 1957 1958 1959 1960	1 3 3 2 1	8955 7840	4.1 4.0 4.2 4.1	553	3 4 1	10720 9340 9065 11550	458 395 406 500	2 3 1	10099 8077 8197	333
86390	75	93	9171	4.3	391	1956 1957 1958 1959 1960	9 13 24 37 4	9590 9264 9219	4.3 4.4 4.2 4.2	393 391	8 16 24 36 2	10741 10588 9903 9655 9200	433 407 405	8 15 22 36 4	9693 10345 9851 9951 9903	473
8 4 008	54	88	9104	4.2	37/	1954 1955 1956 1957	73 21 7	8092 92 7 6	4.3 4.1 4.2	340 376	21 19	9795 9195 10205 9093	37.2 4 1 1	21 18 6	9837 9263 9916 10262	378 406

105/21

- 1

10320 4-4 456

8700 4.2 364

9030 3.9

8410 4.0

1 11070 3.8 426

TABLE 15.--DAUGHTEM-AVERAGE OF SIMES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EMLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

105H

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR SIRE DAUGHTERS RECORDS MILK TEST FAT FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCI. LB. AYRSHIKE 9643 10168 417 9727 396 4.2 10 Lo 1 hO~ 4.3 9920 4.3 428 9920 4.3 ī 9000 4.4 4.4 4.6 510 10061 439 Q 1883 9348 4.3 ¥750 4.3 4.2 unn В Q 8224 4.1 344 4.6 8800 4.1 4.3 3.9 45/ 9623 4.4 4.0 10173 9690 հեև 195H ել և 4.3 3 13620 4.0 543

13375 3.9 517

8700 4.2 364

12480 3.9 486

10320 4.4

9030 3.9

11070 3.8 426

2 11870 498

1 10562 475

11670 498

I 13130 542

1 114-20

ь 7 1

8110 33/

MASSACHUSETTS

TABLE 15.--DAUGHTER-AVERAGE OF TRES IN SERVICE IN ARTHICIAL BREEDING OR ANICATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

104

DAUGHTER AVERAGE BY SIRE

STRE NU.	DAUGHTERS NU.	RECURDS		115T			KECURUS NO.		TLS1 PCT.	FAT LB.	RECORUS	MILK	FAT	YEARLY HE RECURDS %0.	MILK L8.	FAT
							GULR	NSLY								
171200) [5	9004	4.1	428	1947 1949 1950 1951	2 1 1 1	8800 10030 9750 7640	4.4	408 440 515 367						
224975	1	1	10290	3.9	40∪	1950	1	10290	5.4	406						
∠2 ₫30€	5 2	6	11033	4.3	467	1950 1952 1953 1954 1956 1958	 	9180 8450 11820 12440 10980 11130	3.8 4.0 4.6	451 359 446 495 508 553	1 1 1	8210 8460 9000 9000	400 385 406 446	1 6 1	9374 8862 9657 9559	41G 424
237761	3	6	7641	4.5	351	1951 1952 1953 1954 1956	 1 2 1	7520 7940 7590 8570 8500	4.7 4.7 4.3	345 376 354 365 364	1 2	10970 11065	462 452	2	10900	453
240982	2 11	30	7055	4.8	340	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 1 6 7 5 2 3 3	7310 7130 8210 7657 7286 6994 6970 7973 6997 7100	4.9 4.9 4.9 4.0 4.0 4.5	353 352 416 374 356 330 333 354 316 305	2 3 4 2 3 5 1	8955 8558 0770	371	4 2 3 3 1	8061 7063 9632 9806 9614	358 330 382 405 452
245152	2 1	3	9843	4.2	417	1951 1952 1953]]]	10370 10820 8340	4.5	419 483 349	1 1 i	9420 10230 8350		1	9363	440
251367	7 1	2	11520	4.2	484	= 194 <i>1</i> 1948	1	13510 9530		574 593						
255085	2	5	8099	4.8	381	1947 1948 1949	2 1 2	£150	4.6 5.0 4.3	300 406 370						
257510) 3	9	7610	4.8	364	1950 1951 1952 1953 1954 1955	2 2 1 1 2 1	9466 6990 10280 8690 7695 8380	5.0 4.7 4.7 4.7	441 345 488 412 355 374		12330 9280 7940 7750 7305 6800	39 I 355 356 333	1 2 1	ช142 8110 ฮ971	354
258935	i 33	86	8534	5.0	423	1949 1950 1951 1952 1953 1954 1955 1956	2 17 24 14 16 5 6 3		4.9 5.1 5.0 5.4 5.1	558 440 404 416 412 499 469 566 569	1 5 9 8 10 5 7 3	8545 9528 9007	451 445 442 412	9 5 6 3 3	6348 9980 9893 9683 10493	490 479 478
260090) 1	1	6140	4.7	287	1950	1	6140	4.7	267						
262919	, 49	125	7812	4.8	372	1951 1952 1953 1954 1955 1956 1957 1958 1959	7 19 28 21 18 15 7 0 3	7452 7604 8318 8491 8550 8731 8673 8740	4.7 4.6 4.6 4.5 4.5		3	8318 8791	382 387 399 407 404 455 462 411	25 17 15 12 7 5 2	8053 8577 8973 8428 9114 9319 6862 11347	36.7 405 400 431 435 416
260149)	3	9107	4.6	420	1952 1953 1954	1 1		5.0 4.4 4.5		1	10080 10660 11610	43(1		11957 11282	
26658:	3 15	213	8078	4 . <i>[</i>	380	1951 1952 1953 1954 1955 1956 1957 1958 1959	12 46 49 35 40 35 23 21 19	7884 7918 8145 8006 8739 9057 8987 9138	4.7 4.8 4.8 4.8 4.7 4.6 4.7 4.6	373 380 386 381 411 422 426 428	29 40 30	8058 9313 9339 9786 9439 9870 10470 9709 8910 10140	40d 404 416		9059 9663 9466 9547 9691 9542 9286 9995	415 408 410 426 433 431
26907	0 1	4	8408	4.7	3 9 8	1948 1949	1	9890 9260	4.5 4.9							

7180 4.9 355

7180 4.9 355

33G

(900

8160 384

1063 322

TABLE 15.--CAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY BREED,

TABLE 15.--DAUGHTER-AZERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--SKOOPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AV. RAGE BY SIRL

SIKE UA	AUGHTER.	RECORDS		leST PCT.		FRESH YEAR	KcCURUS NO.		TEST PCT.		305-DAY RECORDS	MILK		YEARLY HE RECORUS NO.		FAT
						1956 1957	GUER ? I	7930 8990	4.3	355 377	2	8815 9410	416 431	2 1	8197 8 7 42	3+1
299165	141	372	7611	5.0	370	1952 1953 1954 1955 1956 1957 1958 1959 1760	14 55 65 61 62 48 33 29 2	7834 7082 7113 7461 7923 8031 8715 8821 9665	4.7 5.0 5.0 5.1 4.7 5.0	374 347 353 371 390 403 425 431 477	11 36 01 79 01 45 31 27	3972 9535 7544	362 372 391 406 423 426 419 431 382	56 60 76 57 41 27 21	2062 8656 6704 3836 9152 9285 9601 9778	390 400 411 429 446
291474	14	32	d324	4.6	37 →	1950 1951 1952 1953 1954 1955	4 3 7 4 5 2 2	7475 7716 8393 8703 8732 9090 7220	4.6 4.6 4.4 4.3	348 393 399 402 385 385	4 3 4 5 2 2	8303 7164 10163 8696 10365 10645	378 407 445 397 439 456	3 5 2 2	8422 9135 8840 1060n	410 38
300012	5	19	9310	5.0	465	1949 1950 1951 1952 1953 1954 1955	1 4 4 2 1	13540 10505 9357 9558 7743 6680 10810	5.0 4.8 5.0 4.9 4.7	000 529 449 474 380 513 526	2 2 3 3 2 1	7960 9045 9517 7883 8730 12960	400 438 429 377 371 610	3 2 . i	e920 8257 11707	429 300 571
300208	2	5	9062	5.0	449	1952 1953 1955 1958	 	5150 5820 6740 12220	4.9	272 282 324 605	i 1 1	7000 5750 5560 10416	342 273 260 503	}	6071 5474	2.11 25⊋
303165	ì	2	8370	4.0	390	1955 1956	1	8146 3600	4.0	373 418	1	3460 7170	391 422	1	9134 9450	421 436
303522	3	3	6830	4.8	320	1954	š	6830	4.6	526	1	1110	366	1	8840	415
308118	6	7	1239	4.8	346	1951 1952 1953	∠ 14 1	7955 7285 6680		359 347 325	i 1	9040 8450	430 407			
5 1 4 8 2 4	5	16	9000	4.6	416	1950 1951 1952 1953 1954 1955 1956	2 1 3 3 3 2	10545 12220 9580 8233 7700 8305 11270 7840	4.7 4.7 4.7	497 478 465 408 375 391 542 363	1 3 3 2 1	12010 11637 12100 11683 12480 14250 14600	440 481 463 468 542 545	3	11249 11794 11467 12935 13632	453 491
316026	143	323	7457	4.8	353	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 17 35 51 75 58 45 23 10	5000 7454 7187 7193 7498 7442 7871 8045 9084 7960	4.0 4.7 4.7	255 361 350 348 356 357 369 406 423 360	13 34 50 69 56 42 23 14	3371 8313 8313 8346 8407 9461 9837 9829	427 433 437	31 44 64 55 58 18 13	6415 8569 8615 6617 9093 9335 7889 9505	387 393 395 397 421 458 467 439
310425	2	10	9333	4.5	417	1951 1952 1953 1954 1955 1956 1957	1 1 1 2 2 1 2	11080 12290 8500 8625 8130 7430 10260	4.2 5.0 4.6	491 517 423 394 350 350 449	1 1 2 2 1 2	9550 8420 9705 9765 7590 11105	445 4 71 362	2	9412	44.2
318968	1	3	6813	4.4	302	1954 1955 1956	 	6760 6400 7280	5.9 4.8 4.6	200 309 335						
314479	lo	47	#C88	4.7	420	1949 1750 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 4 2 5 7 8 9 4 3 3	5670 8308 9135 11640 10094 8841 9400 9322 7623 8947 7377 9140	4.7 4.0 4.6 4.9 4.0 4.0 4.0 4.3 3.9	277 390 440 532 466 431 451 443 561 406 518	2 3 2 5 7 8 5 3 3 4 1	8885 8807 9495 9970 9800 10201 10912 9387 9220 8410 9500	442 425 458 474 473 489 524 459 410 378 423	5 7 8 5 3 2 2	10442 8884 9821 10072 1059 1 10429 9030	476 451 471 471 471
314649	1	4	5575	5.1	287	1953 1955 1956 1957) - 	5860 5910 5360 5170	5.1 5.4 5.1 4.9	296 322 273 255	1	4490 6430 6240	214 305 236	1 1 1	7215 5417 5297 5505	333 253 261 253
321444	1	2	9440	4.7	435	1948	1	8490	4.9	413						

TABLE 15.--DAUGHTER-AVERAGE OF SINES IN SERVICE IN ARTIFICIAL BREEDING UNGANIZATIONS--GROUPED BY BRZED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTER				KU3 FK		ECORD AV		BY SIK	E BY	FRESHLNING	YEAK				
SIKE	UAUGHTERS	RECORDS	MILK	1 LST	FAT	FRESH	RECUROS	MILK	TEST	FAT	SUS-DAY (CONTEMP	. AV.	YEARLY HI	ERD AVS	KASE FAT
NO.	NO.	140.		PCT.		YEAR	40.	L8.	PCT.		NO.	LB.		NO.		L8.
						1949	GUERI 1	10470	4.4	456						
32 14 6	2 1	3	7403	5.2	388	1955 1957 1958	1	6790 7660 7760	4.9 5.3 5.5	335 405 424	1 1 1	11120 11130 13050	445 431 501	1	10159 11587 1232a	407 467 499
3235 ₈	4 1	2	11565	5.1	585	1956 1957	1	11910 11220	5.2 4.9	615 554) 1	13570 14930	528 567	1 1	12938 13832	499 534
32419	2 5	14	7047	4.7	327	1951 1952 1953	0 3 5	7252 5943 7234	4.5 5.0 4.6	324 296 336	4 1 4	11685 11160 12068	447 444 471	14	11247	451
32425	0 1	2	6620	5.6	364	1951 1952	1	7280 5960		400 336						
33120	4 2	6	7564	5.5	416	1955 1958 1959	1 4 1	7240 7720 8560		376 455 458]]]	12710 9700 10150	481 479 514	1 1 1	11467 8993 10039	453 460 496
33∠18	5 1	2	90u5	4.7	421	1953 1954	1	8950 9060	4.0	415 426	1	12040 11630	467 465	1	11249 11794	45 I 46 3
33344	2 2	5	6858	4.4	293	1949 1950 1953 1954 1960	1 1 1 1	5770 8230 6200 7060 6900	5.9 4.8 4.8 4.3	536 391 299 504 253	1 1	5440 6520 6980	289 316 345	1	5526 6311	∠6B
33396	5 6	12	6924	4.9	331	1950 1951	2	8010 6153	5.1 4.6	403 293	1	11470	433			
						1952 1953 1954	1 2 2	6250 6935 9230	5.0 4.0 4.7	311 328 428	1	11700 11680	476 455	1	11247 11794	451 463
						1955	1	7480	4.4	330	İ	12440	468	1	11467	453
33441	3 1	2	5890	4.4	261	1954 1955	1	5390 6390	4.4	239 262	1	7500 7610	323 353	1	6987	305 327
33653	5 1	2	7450	5.2	381	1952 1953	1	6550 8350		331 431		11670 12010	451 468	1	11249	451
33658		1	7960	4.7	377	1952	1	7980		377						
33711	7 80	212	8619	4.9	424	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 14 24 26 21 18 19 18 23 22 /1	7757 8370 8909 9012 9172 8272 9197 8631 8990 9003 8596 8420	4.5 4.0 4.8 4.7 4.9 4.8 5.0 5.0	341 401 427 437 439 392 454 415 444 449 422	1 5 11 20 18 19 17 15 17 18 19	8310 10238 9135 8716 9301 9406 9909 9739 9877 9300 1227 9207	410	17 15 16 15 16 16	8878 9441 9439 8595 9449 9175 9393	4250 4250 4012 412 424 434
33 / 4 14	6 2	2	6245	5• l	310	1949 1952	1	6920 5570		358 274	1	o6+0	29.			
33803	5 69	148	7163	4.8	343	1952 1953 1954 1955 1956 1957 1958 1959 1960	9 34 30 28 20 11 4 5	7502 7613 7360 7795	4.9 4.5 4.7 4.6 4.4	339 371 330 352 350 323 356 364 442	7 33 34 27 19 9 3 5	5964 8612 8731 9071 9104 9886 8933 8618 9750	430 411 414	33 32 25 17 9 2 4	8649 8720 9690 9229 9311 9233 8807	415 413
34271	9 1	3	6757	4.9	333	1953 1954 1955	1 1 1	6396	4.9 5.2 4.7		1			1 1 1	6823 7859 620%	365
34523	7 3	7	7579	4.6	344	1951 1952 1953 1954 1955	1 2 2 1	10935 7890	4.7 4.4 4.4 4.5	4/3	1	7480 10545 9930 10050	49a 436		10617 10813 10257	435
34029	5 2	14	Colll	4.6	507	1956 1957 1958 1960	1 1 1	9950 10710 12580 11420	4.i 4.6		1	10570 12450 12620 11680	500 518	1	1007/ 11587 12325 11292	477
34030	1 20	30	6988	4.8	350	1952 1953 1954 1955 1956 1957 1958	1 10 10 4 3 1	6326 7657 7533 8637	4.7 5.0 5.0 4.4	298 577 579 432	10 4 3 1	12154 12150 13555 14013 14500 8250	470 521 537 505	1 u 4 3	11249 11794 11467 12938 13332	4 a 3 4 4 3 3
35320	6 56	114	7794	4.7	360	1949 1950 1951 1952 1953 1954			4.0 4.0 4.1	362 440 207	5 9 11	10003 8310 8037 10305 10630	417 451 514		16320 10571	

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

51KE NO.	DAOGHTERS	RECORDS NO.		IEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCI.		305-DAY RECORDS	MILK		YEARLY HI RECORDS NO.	MILK	
						1955 1956 1957 1958 1959 1960	30±R/ 13 13 13 13 15 3	NSEY 9392 8187 7205 8342 8096 10537	4.7 4.6 4.7 4.7 4.9 4.9	440 583 541 410 594 469	13 12 12 13 15	10335 9815 9236 9979 10041 7935	493 459 443 462 460 336	13 13 12 13 13	10244 9173 9155 9555 9746 10239	503 426 433 458 445 464
35407	3 I	1	5630	4.8	271	1958	1	5630	4.8	271	1	7410	537			
35478	8 2	7	651/	5.5	358	1953 1954 1955 1956 1957 1958 1959	1 1 1	5060 8810 7650 8420 8460 8020 6480	5.6 5.4 5.5 5.0 5.4 5.3 5.0	286 472 423 471 460 429 326	 	7390 8710 8440 8240 8000 8290 8290	352 377 359 352 336 351 359	1	7477 7837 7358 7924 7783 8197	344 319 339 343
35774	9 1	3	7030	5.0	348	1951 1952 1953	1	6700 7720 6670	5.2 4.8 4.9	349 367 328	1	7240	348			
35661	4 1	1	7300	4.9	355	1952	1	7300	4.9	355						
35980	3 2	7	8437	4.6	382	1950 1951 1952 1953 1954	1 1 2 2 1	6750 8160 7985 9590 8060	4.8 4.7 4.7 4.6 4.2	326 382 378 427 339	1	12330 11730 11970 12190	497 450 462 488	1	11249	451
36036	9 63	144	7446	4.7	349	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 14 29 23 22 17 15 7	9127 7377 7084 7381 7677 8266 9041 7880 9020 7122	4.8 4.9 4.7 4.0 4.5 4.6 4.4	432 358 344 341 352 372 400 367 414	1 7 13 18 19 14 12 6 8	12150 9063 7804 8234 8956 9066 9418 10000 10404 9114	558 402 339 358 386 392 413 442 449	18 17 14 12 6 6 5	8618 9161 9450 9339 9639 10657 9270	382 409 407 399 416 466 422
o6 14 9	3 82	194	8124	4.7	379	1953 1954 1955 1956 1957 1958 1959	3 47 44 40 25 14 11	7746 7934 7866 8247 8321 8802 9699 8526	4.7 4.6 4.1 4.8 4.6 4.6 4.7	366 365 372 393 384 408 428 400	8 44 39 25 14 3 5	8935 8945 8409 8782 9266 9319 8948 8346	410 413 395 410 432 420 441 407	8 44 43 39 25 13 8 5	8743 8697 8345 8427 9015 9204 9020 9080	403 407 390 395 418 425 442 439
36246	9 15	53	7243	4.7	340	1949 1950 1951 1952 1953 1954 1955 1956	2 6 9 11 8 7 6 3	7745 8363 7463 7198 7383 7814 7395 7210 6430	5.5 4.6 4.8 4.7 4.6 4.0 4.0	403 388 356 340 342 373 337 331 289	1 3 6 10 8 7 6 3	9880 8073 8957 7650 7325 7281 7723 8733 7560	535 406 401 352 339 344 359 398 349	8 7 6 3	7343 7611 7650 7884 7041	358 354 356 371 330
36254	5 17	33	8133	4.7	385	1954 1955 1956 1957 1958 1959	5 13 6 1 2	8506 8193 9332 8593 8770 9595	4.7 4.7 4.9 4.8 4.7	402 388 451 410 414 453	5 12 5 6 1 2	9854 9636 10658 10277 11130 8185	486 447 499 479 491 407	5 12 5 5 1 2	9459 9584 10591 9932 10573 7772	459 439 501 473 464 377
36365	6 I	4	9505	4.5	424	1955 1956 1957 1958	 	7530 8980 11670 10080		355 364 514 441	1	13140 14140 14770 11690	503 535 564 577	1 1 1	11467 12938 13832 10322	453 497 534 489
36545	7 119	245	8052	4.8	380	1953 1954 1955 1956 1957 1958 1959	27 46 61 34 30 22 22 3	8042 8034 7824 8040 8699 8964 8553 7300	4.9 4.9 4.7 4.7 4.7 4.9 4.7	393 390 383 380 406 433 405 334	27 44 57 32 29 19 22 3	9267 9130 9367 9661 9364 9425 9352 8480	407 401 411 450 432 438 430 307	26 43 54 29 29 18 21	9220 9057 9023 8932 9433 9613 9518 9500	40 9 398 319 396 420 452 443 424
36578	3 5	10	8702	4.4	390	1953 1954 1955 1956 1959	2 2 2 1 3	8705 8590 7560 7230 9980	4.4 4.4 4.4 4.5	382 378 332 319 454	2 2 2 1	7500 7650 7555 7610 9120	344 361 344 364 412	1	6823 7859 8208 9592	323 366 389 441
36007	6 41	82	7956	4.9	394	1954 1955 1956 1957 1958 1959	7 12 24 10 11	8376 8030 7896 8209 7785 8428 7510	4.9 5.0 5.0 5.0 5.0 5.0 4.8	419 400 390 409 392 419 356	7 12 21 15 11 10 1	9/31 9662 10167 9630 8667 9154 10510	457 457 451 438 411 449	6 12 21 12 8 10	9454 9277 9424 9172 8945 9494 9995	442 441 415 419 415 450 448

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTER	AVERAGE	8Y 51	R.		R	LCCKD AV	LRAGE 2	Y SIR	E BY	FRESHENING	YEAR				
SIKE	OAUGHTERS NO.	RECURDS		TEST PCT.	FAI L8.	FRESH YEAR	RECORDS		TEST PCT.	FAT L8.	305-UAY (RECURUS NO.	MILK		YEARLY H RECURDS NO.		
							GULR	NSEY								
368597	1	1	8 100	5.5	448	1952	1	8100	5.5	446						
372994	, ł <u>t</u>	12	8667	5.1	440	1953 1954 1955 1956 1957 1958 1960	4 2 2 1 1 1	7395 10375 8495 10580 12730 13960 13330	5.2 5.2 5.3 5.1 5.3	577 540 446 557 646 740 710	14 22 2 1	12140 11650 13150 14260 11210 12850	479 463 505 541 540 567	14 2 2 1	11247 11794 11467 12938 10442 12906	451 463 453 499 496 631
373404	. 86	227	8227	4.6	378	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	14 34 31 36 31 18 18 11	9030 8126 8216 8738 8008 8282 8239 10135 9516 8600	4.4 4.5 4.6 4.7 4.8 4.6 4.6	397 366 379 403 371 397 396 469 448 411	10 24 30 30 34 29 18 10 11	9676 9100 8931 9046 8868 9441 9416 9109 8725 0303	440 407 396 399 401 441 438 444 433 385	27 28 34 28 17 9 8 3	9025 9228 9027 9082 9276 9447 9325 0589	404 415 415 427 429 453 445 445
373023	2	7	7646	4.7	355	1955 1956 1957 1958 1959	2 2 1 1	7525 6530 8630 8840 8500	4.3 5.1 4.3 4.3 4.3	322 334 367 399 367	2 2 1 1	8290 7775 9020 8710 9030	390 356 416 410 411	1	7586 8742 9254	348 463 426
379457	1	1	13660	4.5	611	1959	1	13660	4.5	611	1	9210	464			
380178		1	/210	5.3	381	1954	1	7210	5.3	381	1	12100	468	1	11794	463
385569	2	4	8469	4.9	415	1956 1957 1958 1959	1 1 1	7480 8120 9140 8690	4.9 5.0 5.1 4.8	365 407 462 418	 	11670 10940 12940 12840	444 433 498 510	1 1 1	10072 11587 12328 13429	407 467 499 536
386975	1	1	3540	5.9	209	1959	1	3540	5.4	209	1	7200	360	1	6943	366
389088	1	1	6510	5.7	371	1952	1	6510	5.1	3/1						
390189	38	9 5	8450	4.7	396	1949 1950 1951 1952 1953 1954 1955	2 19 26 10 17 10 7	8140 9369 8276 8211 7581 8066 8459 7090	5.0 4.7 4.7 4.7 4.7 4.7 4.6 4.5	405 436 387 388 354 379 387 318	2 4 5 6 11 8 4	9485 9468 9338 9980 7958 9145 9750 7620	446 425 424 457 377 435 458 362	8 8 3 1	8144 8990 9403 8916	394 436 460 376
390190	31	35	9080	5.0	451	1958 1959 1960	6 25 4	7797 9087 8695	5.1 5.0 4.9	394 453 432	5 25 3	10856 9666 10010	478 445 461	5 24 2	9991 9993 11058	446 451 477
394541	100	181	8433	5.0	415	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 18 14 14 21 27 21 29 26 5	8507 7694 0173 9208 9673 9005 8653 8310 8097	5. I 4. 9 5. U 5. U 5. U 5. U 4. 9 5. U 4. 9	434 379 410 451 462 446 433 405 406 345	14 12 13 13 13 19 20 19 23 26 5	8180 9393 8824 9265 9179 10696 9972 9833 9699 7460	388 424 386 410 412 480 437 440 434 357	12 10 18 20 18 22 24 5	8808 9044 9396 9488 9436 9612 9580	392 404 421 433 421 443 434
3956 15	13	30	7828	4.8	371	1951 1952 1953 1954 1955 1956 1957	1 6 7 4 4 3 3	5570 7692 7971 8600 8133 8237 9113 8435	4.5 5.1 5.0 4.9 4.6 4.6 4.5	237 390 394 417 311 383 446 385	5 4 4 3 3 2	8506 9418 9428 8810 9663 11417 9940	390 409 401 380 416 543 440	5 4 3 3 3 2	9352 9407 9069 9207 9581 10045	410 404 388 393 473 431
398391	1	4	11600	4.8	553	1955 1956 1957 1959	1	9700 12580 11010 13110	4.0 4.7 4.1 4.8	467 597 515 631	 	12690 14100 14780 9890	480 533 564 442	1 1 1	11467 12938 13832 10595	453 497 534 501
401801	1	1	10040	4.8	477	1950	1	10040	4.3	477	1	14970	552	1	14028	531
404003	1	1	9010	4.3	388	1957	1	9010	4.5	368	1	11340	434	1	9548	409
404434		2	7615	4.9	373	1954 1956	1	9106 6130	4.9	443 302	1	7480 6380	347 299	1	7859 7815	366 356
408397	' 5	16	8760	5.2	453	1951 1952 1953 1954 1955 1956	1 3 3 2 2 1 1	7600 7730 7757 7860 7895 8670 8910	6.5 4.9 5.2 5.1 5.0 4.7 4.3	475 319 401 397 394 408 426	3 3 2 2 1	8217 8543 8105 8155 6640 7440	396 418 395 389 315 347	2 2 2 1 1	8093 8617 8137 7423 7041	400 3 x8

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANILATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIKE	DAUGHTERS			TEST		FRESH	RECURUS	MILK		FAT	RECUROS	MILK	FAT	YLARLY HE RECORDS	MILK	FAI
NO.	NO.	NO.	Lu.	PCT.	LB.	YEAR	NO.		PCT.	LB.	.40.	Lt.	L8.	NO.	LB.	Lt.
						1958 1959	GUERI 2 1	12240 12150	4.8 4.5	586 547	1	11390 11680	487 4 7 8	2	11685 12568	494 506
41793	9 1	5	6564	5.2	340	1953 1954 1955) 1 1	7160 7370 6010	5.3 5.2 5.5	378 380 331	1 1 1	7570 7810 8120	343 360 368			
						1956 1957	1	5950 6330	5.0	298 314	1	7700 9160	365 421	1	7586	348
41998	8 1	1	57/0	4.7	272	1960	1	5770	4.7	272	1	6560	232	1	9984	373
42067	2 1	1	8170	4.8	389	1958	1	817 0	4.8	389						
42534	5 1	1	8590	5.3	452	1957	1	8590	5.3	452	F	9310	444	1	8742	416
42636	3 17	18	8789	4.6	401	1957 1958	3 6	673 <i>1</i> 9947	5.2	345 440	3 6	8097 9765	421 450	3	8756 8677	436 394
						1959 1960	8 1	9033 6940	4.5	4 I I 304	1	9348 6650	44 I 30 3	6	9459	454
42682	0 2	2	7915	4.5	350	1959 1960	1	8300 7530	4.1	340 359	1	10670 10910	389 398	1	10268	385
42939	6 4	8	9344	4.9	455	1954	2	7420	4 - 7	352	2	12005	468	2	11794	463
						1955 1956	3	9310 10923	5.0	425 547	2	11315 12993	482 516	2 2	10426	454
43338	4 1	1	12570	4.7	590	1957 1958	1	9360 12570	5.4	506 590	1	12540	615 591	1	11238	535
43393		'	6990		332	1958	,	6990	4.7	332	'	10250	388		10137	348
44096			6700		290	1953		6700	4.5	290	,	12190	489		11249	451
44256		12	8426		413	1953	1	9540	5.0	474		12000	467	1	11249	451
14230			0.20			1954 1955	3	8870 8010	4.9	434 404	3 3	11760	465	3 3	11794	463 453
						1956 1957	3	8697 6680	4.8 5.0	419 331	3	14263 14830	539 566	3	12938 13832	499 534
						1958	ì	7680	4.8	372	i	15650	590	i	14028	531
44558	3 2	6	9184	5.0	454	1955 1956	2	7615 8820	5.3	400	1	11950 11410	455 425	1	7761 9875	286 367
						1957 1958	1	10820 9730	4.5 5.1	487 496	1	12350 9860	414	1	11925	458
						1959	1	10500	5.0	529	1	11000	520	1	11772	505
46844	1 3	5	8932	5.1	448	1954 1955	1	9350 6860	5.1	476 354	1 1	12140 13700	467 531	1 1	11794 11467	463 453
						1956 1957	2 1	9200 12120	5.0 4.8	461 582	2 1	13800 14920	532 562	2 1	12938 13832	499 534
47850	6 I	4	8293	4.3	362	1959	2	9070	4.5	411	1	11600	508			
			07.0			1960	2	7515	4.2	313	1	10020	462	1	11510	509
49776 50016		1 56	9360		510	1959	1	9360	5.4	510 291	1	9860 8075	504 382	1	10976 7472	555 358
30010	9 40	30	7786	4.7	368	1956 1957	15	6275 7673	4.5	345	14	10701	458	14	9624	409 44;7
						1958 1959	18 17 4	864 I 8358	4.8	413	16 16	9422 8934	425	18 15 4	9855 9689	431
50031	4 14	20	8749	4.9	434	1960 1958	8	6893 8478	4.9	329 418	3 7	6747 8989	283 415	7	7827 8891	350 409
3003	, ,,	20	0147	**/	434	1959 1960	3	9059 8077	4.9	449 387	9 3	10139 9757	433 435	6	9192 9930	425 432
50494	6 6	6	10268	5.2	527	1959	6	10268	5.2	527	6	9722	437	6	10134	452
50 5 0 7	9 8	8	6921	5.1	351	1959 1960	<i>†</i>	7249 4630	5.1 4.8	369 222	6	9680 5290	433 245	6	9977	450
51294	4 11	11	8643	5.1	436	1958 1959	1 9	7820 8486	4.9 5.1	381 430	1 8	8280 8961	369 426	1 8	8982 9572	390 443
						1960	1	10880		541	ì	9140	405	i	9625	440
52614	3 1	1	6120	4.4	270	1960	1	6120	4-4	270	1	8850	476	1	9854	520

TABLE 15.—-DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL CREEDING ORSANIZATIONS—-GROUPED BY BREED, BY YEAR OF FRESHENING—-RECORDS FROM THIS STATE ONLY

					KUS FK		STATE UN									
	DAUGHTEK	AVEKAGL	RA 21	KL		R	ECORD YA	LRAGE :	SY SIR	ŁLY	FRESHENI.40					
SIRE NU.	0AUGHTERS NO.	RECUROS		PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		KECURUS NO.	CONTEMP MILK Lu.	FAT	YLARLY HI RECORDS	HILK	FAT LS.
							HULS	TEIN								
653463	1	1	9460	3.6	346	1950	ı	9480	3.6	346						
675409	1	3	10650	3.0	381	1947 1948 1950	1 1 1	10530 9010 12410	3.6 3.5 3.5	396 311 437						
673525	. ś	9	117/0	4.1	4/5	1947 1949 1950 1952 1953 1954	5 1 1 1 1	10213 11140 16850 16400 14750 15450	4.4 3.9 3.0 3.6 4.0 4.2 4.0	446 433 604 563 591 647 555	1 1 1 1 1	10980 11c40 11b70 11620 11750 12600	391 465 459 473 461 479	1 1 1	11249 11794 11467	451 463 453
675841	1	1	12350	3.9	477	1947	ı	12350	3.9	477						
680074	1	1	13670	4.9	39 I	1955	1	13670	2.9	341						
684991	2	2	11635	3.6	412	1948 1952	1	10640 12670		398 426						
695644	2	6	11300	3.7	413	1947 1943 1949 1950 1953	1 2 1 4 1	11310 11670 11430 9830 13090	3.6 3.7 3.7 3.7 3.7	402 408 423 359 479						
704282	1	5	9108	4.0	360	1948 1949 1950 1952 1953	1 1 1 1	8060 9140 10190 10820 7336	3.7 3.8 3.7 4.0 4.4	300 350 462 430 319		9070 8760 0900 8370 9130	32; 297 345 334 334	1	10976	419
705343	3	15	11010	3.8	411	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 2 2 1 2 2 1 2	9680 9215 8410 13870 14235 14900 13000 15175 15890 14890	3.5 3.6 3.7 3.8 3.8 3.8 3.7 3.6 3.6	573 526 508 508 537 553 496 572 569	1 2 1 1 2 2 1 2	12730 13015 12460 11560 11600 11770 12605 14070 14890	458 479 501 447 439 466 460 497 535	2 1 2 1	11249 11794 11467 12938 13532	451 403 453 499 534
715812	. 1	6	11390	3.6	409	1948 1949 1950 1951 1952 1953	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7830 11800 12590 13610 11350 11160	3.5	271 441 464 516 390 369	1 1	9800 12010	405 461 498 428		12818	
716598	11	25	9931	3.8	374	1947 1948 1949 1950	19 4 1	9871 10903 8870 7970	3.8 3.6 3.7 4.1	370 404 332 326						
730516	621	1400	10933	3.8	409	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	13 77 142 281 312 229 146 86 67 40	12143 11061 10752 10876 10770 11292 12196 12480 12577 12016		465 419 412 414 404 423 445 465 445 445	4 31 96 264 299 215 143 32 64 40	12893 11345 11724 11325 11295 11438 12202 12250 11966 12182 11363	489 431 437 421 419 428 456 456 464 455 467	236 265 207 137 75 54 32 5	11383 11338 10981 12009 12213 12656 12306 13547	425 412 454 464 462 461
738351	42	136	12702	3.9	492	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	6 3 5 0 15 25 20 15 6 7 7	13001 12965 12661 13787 15127 14763 14725	3.6 3.7 4.0 3.7 3.9 3.9 3.9 3.9 3.0 3.7	475 495 533 482 493 512 511 487 524 563	4 2 3 6 12 25 20 15 6 7	11987 11167 11466 11821 11665 12871 13857	446 469 459 492 533 553	20 15 6 7 5	11249 11794 11467 12938 13832 14170 14236 13996	463 453 499 534 536 544
746498	3 22	61	13466	3.6	483	1947 1948 1949 1950 1951	14 8 11	12075 13909 14546 15234 15472	3.7 3.6 3.4	507 520 518		153o0 15200	580 544			

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

GAUGHTER AVERAGE BY SIRE

SIKE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		SOS-DAY (RECORDS	MILK		YEARLY HE RECORDS NO.		FAT
						1952 1953 1954		15798 15560	3.2 3.1 5.1	512 435 421	1	15810 14690 14835	576 516 497	1 2	16208 15227	
14124	1 2	6	9672	3.5	348	1947 1948 1949 1950 1951 1953	. 1		3.8	274 325 392 456 414 525	1	14730 11210 13100 11090 13130	569 365 480 424 501	ı	11467	411
74724.	2 5	9	13266	3.5	454	1950 1951 1952 1953 1954 1956 1957 1958 1959	1 1 1 1 1 1	10360 11890 13640 13910 14650 15050 15800 18540 12250	3.8 3.1 3.3 3.2 3.4	400 455 426 455 463 518 544 646 425				ı	12437	512
74004	7 1	3	9677	3.6	363	1947	3	9677	3.0	363						
74844	1 4	9	12579	4.1	515	1752 1953 1954 1955	3 3 2 1	11787 14333 14095 14130	4.2 4.0 4.0 3.6	490 574 562 505		11645 12017 11840 13550	444 472 465 529		11249 11794 11467	463
74720	1 7	14	11050	3.6	398	1950 1951 1952 1953 1954	3 6 3 1	11937 10245 12337 13530 12240	3.6 3.6 3.8 3.9 3.6	427 305 466 534 446	; ;	11910 12130 11600	457 486 465	}	11247 11794	
75027	0 1	3	13670	4 • 1	566	1953 1954 1955	1	12520 15110 13980	4.2 4.0 4.1	522 607 569	1	13430 14580 13090	518 533 466	1	10306	
75027	5 63	152	11534	3.6	413	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	0 34 26 20 21 13 9 9	11705 12019 11717 12191 11020 12364 11106	3.0 3.6 3.4 3.0 3.5	429 408 422 415 420 430 372 441 389 416	20 12 8	11655 11701 11975 12020 11964 12233 13020 12618 11328 12630	474 424 440 433 443 457 472 465 408 456	20 25 20 12 6 7	11948 12666 11016 11907 11464 12547 11750	440 440 441 441 441 441
75349	6 2	14	14308	3.4	485	1948 1949 1950 1951 1952 1954 1955 1956 1957 1958 1959	1 1 2 2 2 2 1 1 1 1 1	14910	3.4 3.3 3.1 3.2 3.2 3.1	516 562 509 471 567 477 409 290 391 446 462	 2 2 1 1 1	11900 10690 11370	387 405 413	1 1 3 1 1	12917 9952 10170 10366 12633 12415	351 350 365 451
75384	8 2	14	11517	3.3	37 8	1947 1948 1950	1 1 2	14010 11380 10625		436 345 354						
75884	6 5	10	11547	4.0	455	1950 1951 1952 1953 1954	2 2 3 2 1		4.8 4.0 4.1	350 402 486 466 470	2 1 2	12145 11155 11600 13075 11790	479 424 445 495 462	2	12383 11794	
75919	3 I	ц	141/5	5.7	519	1955 1956 1957 1958	1 1 1	13240 15840 17320 10300	3.5	ან 675			603 682	1 1 1	15402 13887 16372 15761	540 640
/61 y 7	7 5	16	143%	3.6	517	1951 1952 1953 1954 1955 1956 1957 1958	2 4 3 1 1 1 2	13675 13370 14207 14230 17200 15690 15400 16120 13930	3.0 3.0 3.5 3.5 3.5 3.5	478 464 504 510 574 525 514 581 732	1 2 2 1 1 1 1	14400 13090 13445 10970 9610 11910 13550 11970	377 325 360 492	 	9752 10170 10366 13576 13930	351 350 365 511
16294	5 1	3	10473	3.5	370	1947 1950 1951	1 1 1	11140 12080 9580	3.3	381 393 355						
76500	8 2	5	11014	3.9	447	1947 1948	3 2	11067 12070		421 458						
76606	5 3	7	12151	3.7	441	1951 1952	1 2	10200 11805	3.6	309 428	1	11320	4 3 Ü			

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

TABLE 15.---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS (ROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRL RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	UAUSHIER	AVENAGE	01 31			N	EC IKO AVI	LAGE (1 310	L 01	r KL 3HLNI M3	TEAR				
SIRL NO.	DAUGHTERS NO.	KECUROS		TEST PCT.		FRESH YEAR	KLCURDS NO.		TEST PCI.		305-DAY (RECORDS NO.	MILK	FAT	YEARLY HI RECORDS NO.		FAT
						1953 1954 1955 1956 1957 1958	HOLS1 7 4 2 2	161N 9820 9129 9998 12920 15960 15910	3.6 3.7 3.6 3.8 3.2 2.9	366 339 358 489 507 465	7 7 4 2 2	9267 9139 10793 13920 13055 12560	351 341 422 510 484 473	8 5 4 2 2 1	9600 10362 10470 12660 13298 13200	362 383 393 472 512 484
79611.	3 I	1	9650	4.1	392	1949	1	9650	4 - 1	392						
7984 o	1 2	7	14355	3.4	484	1948 1949 1950 1951 1952 1953	1 1 1 1 1 2	8620 14060 11860 10530 16770 15060	3.0 3.7 3.8	319 311 442 400 344 309	 	12810 12740 11960 11030 11560 12835	463 468 469 419 449 443	2	12383	469
19900	1 1	2	16750	4.4	721	1954 1955	1	16770 16730		741	1	14970 16240	637 719			
79979	9 10	17	11260	3.9	429	1954 1955 1956 1957 1958 1959	2 2 3 4 2 2	11905 11715 11776 11450 10425 12125	3.5 3.9 3.9 3.9	470 418 451 446 393 446	2 2 4 4 2 2	10550 10760 10560 11145 11400 11655	450 428 417 447 426 442	2 2 4 4 2 2	10301 9221 9565 11006 10399 12099	470 381 391 447 383 459
79954	1 2	3	80011	3.5	382	1947 1950	2	10765 11250		378 565						
79987	5 764	1696	12249	3.6	438	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 14 36 99 172 211 241 242 230 227 189 30	12198 12389 11654 12125 12119 12032 11804 12134 13060 13367 13513 12033	3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	423 450 420 437 432 427 417 425 463 480 490 439	7 23 72 160 207 229 228 211 204 183 24	12496 11153 11620 11510 11401 11421 12207 12542 12631 12313 12335	475 429 432 426 423 427 454 469 467 468	148 159 210 222 174 136 170 27	11564 11483 11249 11997 12415 12971 12900 13289	4∠d
80001	6 I	4	10118	3.4	339	1949 1950 1952 1953	1 1 1	10550 10340 10010 9570	3.4	346 353 327 331	 	10690 10550 7910 8370	405 415 273 329	1	9080	347
d0 137	5 1	3	10457	4.3	451	1953 1954 1955	1 1 1	11000 10480 9090	4.2	501 435 416	1 1 1	11220 10610 10610	40 I 376 38 s	1 1 1	10311 11576 10377	301 423 37)
8038 <i>/</i> 1	8 1	5	10400	3.6	373	1951 1952 1953 1954	2	9435 10060 12630 10440	3.1	337 348 467 375	1	12530 12590 11150	414 457 417			
d0625	6 1	1	10340	4.8	494	1949	1	10340	4.8	474						
80491	6 1	1	9510	3.2	30 s	1951	1	9510	3.2	305						
81042	7 1	2	15400	4.1	634	1950 1952	1	15170 15630		565 10∠						
812639	5 10	35	13049	3.7	474	1951 1952 1953 1954 1955 1957 1958 1959	3	13860 13975 13231 11937 11657 13575 14103 15377	3.6 3.3 3.4 3.5 3.8	389 397 477	5 0 6 3 2 4	13586 14230 13597 13188 13117 14530 14013 13877			15631 14497 15761 17342 16503 17164	590
81514.	3 538	036	11544	3.9	456	1954 1955 1956 1957 1958 1959	224	10744 10660 11336 11701 12226 12144 12060	3.9 3.9 3.9 3.7 3.7	414 416 437 454 480	30	11963 12056 12397	441 441 455 456 479 409 470	112 108 179	12065 11850 12275 12613	449 436 453 474 493
8 F52 30	6 I	6	14780	3.5	516	1951 1952 1953 1954 1955 1956]] 	13410 13410 14280 13190 14970 19420	3.5 3.4 3.5 3.3	469 469 468 499	 	12460 13440 13020 12150 13840 14210	480 469 466 431 505 514	1 1 1	12813 12066 11598 13069	
616 28	0 3	5	10 145	3.8	382	1955 1956 1957 1958	1 1 1	11690 10730 10700 8540	3.7	398 397	1 1 1	9500 12420 9300 8970	363 499 327	1	12600 12655 3687	4/4 508 339

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRIED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NU.	DAUGHTERS	KECOROS NU.		TEST PCT.		FRESH YEAR	RECURUS NO.		TEST PCT.		305-DAY RECORDS NO.			YEARLY HE RECOROS NO.	MILK	
						1959	HOLS	4510	3.8	323	1	10300	393	1	9984	393
82∠06) 1	3	15003	3.6	548	1951 1952 1953	1 1 1	14070 16230 14710		510 588 546	1	10970 11980 11650	417 466 454	1	11247	451
822913	S 3	ц	15237	3.5	530	1954 1957 1958 1960	1 1 1	13340 15980 18240 14840	3.3 3.5 3.5 3.6	444 557 640 530	1	15220 11320 12820	575 503 535	1	16448 14126 13690	603 544 550
826710	2	5	11495	3.6	413	1949 1950 1951 1952	1 1 2 1	11990	3.7 3.5 3.0 3.5	440 358 390 461	1 1 1	12860 12000 11030 12000	472 471 419 467			
827033	5 5	17	12730	3.8	482	1951 1952 1953 1954 1955 1956	1 3 4 3 3 2			498 563 465 481 387 556 667	\$ \$ \$ \$ 2	11340 11913 11643 12423 14060 14690	444 469 463 473 533 562	3	11249 11794 11467 12938 13832	451 463 453 499 534
828522	2 41	107	12202	3.6	437	1949 1950 1951 1952 1953 1954 1955 1956 1957	5 15 18 15 13 15 7 8 9	11547 11584 11677 13895 11702 12463 12590 13280 14333 14983	3.6 3.7 3.7 3.6 3.6 3.6	394 418 415 490 431 448 450 467 496 595	4 8 11 12 15 7 8 7 3	10710 11123 11578 10862 12441 11869 13235 13289 11163	385 411 445 403 462 457 500 505 468	10 7 7 5	11225 11862 12593 12705 13433 11979	443 483 492
828758	3 26	82	11395	5.9	438	1949 1950 1951 1952 1953 1954 1955 1956 1957	1 15 14 14 9 9 10 4 4 2	13380 10672 10469 11906 11919 12894 12474 14403 13988 14485	3.9 3.9 3.9 4.0 3.9 4.1 3.9	527 429 405 457 470 509 481 591 547	5 6 8 9 10 4 4 4	10952 10070 11911 11107 11867 12712 13193 15088 13620		8 10	11585 12027 12188 13740 14870 14791	446 458 459 532 562 569
830269	· 1	6	14038	3.5	500	1952 1953 1954 1955 1956 1957	1 1 1	11950 13570 13920 12800 13930 10060	3.6 3.4 3.5 3.6 3.5 3.6	433 464 491 467 489 658	 	11370 11740 11120 10340 12370 12990	406 443 422 398 452 470	1 1 1 1	12448 11521 11478 11979 13036	456 423 421 440 469
83032		1	10750	3.5	377	1949	1	10750		377						
830593	3 3	10	13278	3.3	442	1952 1953 1954 1956 1957 1958	3 1 1 1 2	14160 13590 14190 11930 12340 12480	3.4 3.4 3.2 3.4 3.4 3.4	464 464 460 404 416 411	3 2 1 1 1 2	12793 11935 13640 10100 10580 10920	451 477 522 360 376 422	1 1 1 1	13516 11401 10170 10366 12633	422 350 365
831070) 1	1	13110	3.8	493	1958	1	13110	3.8	493	1	15540	585	1	14028	531
832735	у	7	9872	3.5	348	1953 1954 1955 1958	2 2 2 1	9925 9355 11515 12280		336 346 408 383	1 2 2 1	13120 10940 10810 11480	474 414 391 422	1 2 2 1	8840 11516 10737 12121	4/9 396
83422	2 2	2	15100	3.5	527	1952 1957	1 1	16570 13630	3.4 3.6	570 484	1	12160	440	1	11500	420
83702	5 16	25	13048	3.9	507	1952 1954 1955 1956 1957 1958 1959	1 2 1 2 4 4 9	13880 12485 12490 12375 13510 14568 12882 16380	3.8 3.6 3.7 3.6 3.8 3.8 3.9	531 476 448 454 511 550 508 618	1 2 1 2 4 4 9 2	13200 12670 12670 13020 12870 13050 14219 15720	493 484 480 485 466 501 546	1 1 2 3 2 7 2	12917 11467 12459 13301 14268 14083 14214	453 470 491 531 536
34245t	3	14	1220ช	3.6	435	1950 1951 1952 1953 1954 1955	1 3 3 3 2 1	9650 12160 13577 12527 11395 14860 11250	3.6 3.5 3.4	334 447 480 446 395 499 397	1 3 2 3 2 1	13120 10730 10930 10797 9860 9330 9710	423 452 476 455 436 429 422		11856 11064 11500 11183	46∠ 462
04412	2 2	łş	11552	4.2	488	1955 1956 1957	2 1 1	11715 10340 12360	4.3 4.1 3.9	497 427 483	2 1 1	12060 12770 13990	476 497 534	2	11287 11903	
84427	6 18	32	11534	3.8	444	1953 1954 1955	1 2 5	12960 12280 11742	4 - 1	477 510 470	1 2 4	12690 12440 11958	454 468 455	1 4	12154 11404	

TABLE 15.--OAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	OAUGHTERS NO.	RELOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCI.	FAT Lb.	305-0AY RECURDS NO.			YEARLY H RECORDS NO.		
						1956 1957 1958 1959 1960	HOLS1 2 3 7 9 3	TEIN 14240 12327 11731 11788 8787		564 480 461 465 337	1 3 6 1 3	14180 12073 11063 11663 12360	553 464 437 449 465	1 3 2 9 2	14094 11220 11325 12490 11140	547 428 443 480 434
846425	5 4	6	14971	3.8	570	1958 1959 1960	2 3 1	16700 15250 14820	3.9 3.8 4.0	641 575 597	1 2 1	15540 14430 16440	590 569 633	2 3 1	14410 14319 14214	548 544 546
646d 56	5 5	10	10937	3.8	425	1953 1954 1955 1956 1957 1958 1959	1 1 2 1 1 1 3	10440 10040 8250 11525 15030 15270 11477	4.0 4.2 4.1 3.9 4.0 4.3 3.7	413 424 335 449 599 655 433	1 1 2 1 1 3	8060 14860 11415 16620 11000 10447	313 555 430 626 474 402	2 1 1 3	10998 14661 11085	424 569 477 445
846979	9 2	3	9905	4.2	408	1956 1957 1958	1 1 1	9610 13650 8180	3.9 3.9 4.4	370 533 363	1 1 1	10110 12340 12830	421 513 526	1 1 1	10072 11587 12328	407 467 499
847579	9 6	12	12696	3.8	486	1952 1954 1956 1957 1958 1959	1 2 1 1 3 4	12370 11180 14640 15570 14020 13605	3.5 3.7 3.6 3.7 4.3 3.9	427 414 531 576 602 533	2 1 1 2 2	10095 13270 13640 14725 13955	412 521 530 547 545	2 1 1 2 2	10600 12960 13233 14056 14083	450 529 530 539 565
850298	В 1	3	11397	3.8	425	1956 1957 1958	1 1	9730 12660 11800	3.9 3.3 4.1	382 412 480	1 1 1	12710 12740 9520	465 474 407	1	11249 12709	41 7 482
854066	3	14	13159	3.8	503	1950 1951 1952 1953 1954 1955 1956	1 1 2 1 3 3 2	15200 12330 14720 12020 11233 12440 16645 22760	3.8 4.0 3.6 3.9 3.9 3.6 3.5 4.1	575 489 552 466 435 458 590 941	1 1 2 1 3 3 3 2	11960 11960 11860 11980 11790 12720 14280 15400	460 460 458 467 465 483 542 579	1 3 3 2 1	11249 11794 11467 12938 14028	451 463 453 499 531
85535	1 2	3	10183	3.4	346	1951 1952 1955	 	11520 12030 8590	3.4 3.5 3.3	392 421 284	1	10610	399			
855699	9 1	1	9300	3.2	294	1951	1	9300	3.2	294						
857484	4 7	16	11550	3.8	434	1949 1950 1951 1952 1953 1954	2 3 1 1 5	12120 13590 18230 12820 12174 12470	3.7 3.9 3.6 4.2 3.8 3.8	449 540 656 532 461 468	1 2 1 1 5	12050 10015 14500 12230 11184 12250	502 409 539 521 426 450	5 4	10606 11565	401 437
858418	В 6	10	13018	3.8	492	1956 1957 1958 1959	2 2 2 4	11955 12850 14025 13453	3.7 3.7 3.8 3.9	442 462 521 520	1 2 2 4	11640 13020 15565 14295	437 496 588 542	1 2 2 3	12535 12977 14388 14385	457 490 542 549
860603	3 5	13	11595	3.6	422	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 2 1 1 2 1 1 2	9590 9785 11665 12600 11990 11515 10700 9390 11530	3.7 3.8 3.7	338 345 420 449 421 429 406 343 427	1 2 1 1 2	11640 13950 11520 10040 10310 9660 9465	447 506 469 411 374 415 351	2 1 1 2	12175 13374 11892 12088	440 511 452 456
862248	3	10	14273	3.8	550	1953 1954 1955 1956 1957 1958	2 2 2 1 2 1	13415 12860 14350 14810 14175 15200	3.8	511 485 544 559 505 615	2 2 2 1 2	12060 11995 12355 11770 14670 14990	449 447 457 427 548 572	2 2 2 1 2	11849 11658 11473 11979 13832 14116	454 443 437 440 534 546
86375	6 1	2	15685	4.2	654	1957 1958	1	16440 14930	4.1 4.3	672 636		14870 15580	561 588	}	13832 14748	534 553
864811		1	13870		521	1954	1	13870	3.8	521	1	14210	513	1	14214	526
86532	3 7	8	10172	4-0	399	1958 1959	5 3	10422 9287	3.8 4.3	390 407	3	11940 10457	483 426	4 2	11865 12317	476 482
865513		39	14344		559	1955 1956 1957 1958 1959 1960	2 5 6 9 11 6	14840 17316 18895 13852 13087 15470	4.0	592 672 723 519 524 603	2 5 6 7 11 6	12785 13814 14690 13059 14674 13267	496 530 554 497 565 494	2 5 6 4 11 6	11467 12938 13832 13519 14225 13772	453 499 534 507 543 525
86591	2 1	3	15593	3.5	549	1955 1956 1957	1	12670 17100 17010	3.4 3.6 3.5	435 611 601	1	12900 13560 15650	477 503 566	1	14344	516
86063	5 2	3	7950	4.1	322	1954 1955	1	8280 8440	3.c 3.9	312 328	1	9610 10820	357 384	1	11576 10377	

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAUGHTER	AVERAGE	8Y SI	RE		R	ECORD AV	ERAGE 8	SY SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY RECOROS NO.		. AV. FAT L8.	YEARLY H RECOROS NO.		
						1957	HOLS 1	TEIN 7540	4.3	323	1	8530	363	1	8066	346
867412	2 17	43	10601	4.1	435	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 2 2 3 6 5 6 5 5 6	9840 11600 12225 11517 9828 9888 10882 9768 10626 11708 8525	4.6 4.2 4.2 3.6 3.8 3.9 4.0 4.1 4.2 4.4	452 493 505 414 371 387 439 392 448 509 353	1 3 5 4 6 5 5 6	10660 10280 10793 11200 10805 12207 12678 12392 11992 10700	398 364 389 412 396 447 473 462 467 403	2 4 6 4 5 5 2	10312 11325 10611 10602 12301 12077 12088 10426	402 423 395 409 460 457 463 399
867643	3 205	540	11529	3.7	419	1951 1952 1953 1954 1955 1956 1957 1958 1959	6 67 119 99 83 60 42 35 27	10452 10781 10995 11499 12134 13268 13212 13909 13714 12120	3.5 3.7 3.6 3.6 3.5 3.5 3.5 3.5	363 398 406 414 432 465 459 486 490 379	2 49 108 93 77 57 40 35 27	11720 11402 11625 11364 11804 12625 13048 12715 12766	467 421 428 418 435 466 479 475 474	102 91 68 55 36 27 21	11647 11797 11691 12792 13176 12958 13392 12720	431 439 431 477 489 483 500 467
869473	3 20	55	12402	3.7	463	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 6 7 11 8 8 5 8	10790 11860 12587 12719 13679 13488 13052 12466 12090	2.5 3.8 4.1 3.7 3.8 3.9 3.7 3.6 3.5	267 450 516 476 514 515 484 450 427	5 7 11 8 8 5 8	11740 11873 11723 12805 14015 14866 13371 14650	447 466 454 486 535 563 518 552	6 11 8 8 5 5	11324 11762 11522 12938 13832 14456 13974	44 1 455 45 1 499 534 546 534
872445	5 41	129	12766	3.8	479	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 5 13 17 22 19 13 13 8 10 8	14010 12394 12943 13002 13285 12537 13431 12219 12898 12214 12601	3.7 3.7 3.7 3.7 3.8 3.7 3.8 3.7 3.8 4.1	512 460 482 484 489 472 497 459 477 468 507	1 3 9 15 22 19 13 13 10 8	13090 12840 12793 12477 12578 12455 11793 12445 12536 11821 11796	478 467 488 473 474 484 465 490 459 463	21 19 11 10 7 8	11755 12251 11638 11957 11792 12184 12009	438 469 452 470 464 457 480
878665	5 1	1	11760	3.7	432	1954	1	11760	3.7	432	1	14500	518			
880178	3 1	3	10110	3.6	365	1953 1954 1955	1 1 1	11000 10090 9240	3.8 3.7 3.3	414 373 309	1 1 1	9660 10090 10750	413 403 435	1	8818 9668	382 402
881376	5 10	16	13399	4.0	533	1954 1955 1956 1957 1958	3 1 4 4	13663 13140 13543 13398 12305	4.1 4.0 4.0 3.9 4.1	562 528 537 524 504	3 1 4 4	11927 13550 14095 14638 13175	465 528 537 553 489	3 1 4 4 2	11794 11467 12938 12982 14388	463 453 499 496 542
88 19 84	32	79	11145	3.7	404	1952 1953 1954 1955 1956 1957 1958	6 19 16 16 10 7 3 2	11247 10973 11301 11096 11807 11996 13127 12985		411 395 420 399 443 452 489	4 16 15 15 8 6 2 2	124 18 10988 10907 10912 11366 11428 11990	451 416 411 424 426 427 449 436	14 15 11 8 6 2	10584 10798 10751 11114 10964 11729 13560	394 406 408 422 407 434 507
8837∠5	5 2	5	12001	3.5	416	1954 1955 1956 1957	1 1 2 1	11600 10620 13040 10500	3.5	384 373 458 359	1 1 2 1	11390 11830 10820 11710		1 1 2 1	7946 9145 11015 11500	434
884836	3 8	22	10821	3-9	419	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 1 2 2 1 3 3 2 3 1 3	11710 11450 10205 10575 10760 9237 11643 11980 11477 14360 13467	4.0 3.9 4.0 3.8 3.9 4.0 3.7 3.7	476 454 402 427 411 354 455 473 430 537 539	3 2 3 1	15830 12840 10970 12267 13555 11680 15520 13230	686 459 401 465 553 426 585 502	2 1 1	11865 11282 12938 13832 14028 13400	433 499 534 531
887814	2	9	12308	4.1	504	1951 1952 1953 1955 1956 1957	1 2 2 1 2	12900 12655 13960 10690 10460 11650	4.2 4.1 3.9	604 526 575 421 386 413	1 2 2 1 2	11390 11685 11640 12400 14010 14960	429 447 464 467 537 553	2 1 2	11249 11467 12938 13832	499

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DI TEAK	OF LKEST	JEN ING.	KECU	KUS FKL	u 11112	STATE UNI	. '								
	OAUGHTER	AVERAGE	BY 51	KE		R	ECORO AVE	RAGE E	Y SIR	E BY	FRESHENING					
SIKE NO.	DAUGHTER5 NO.	RECOROS NO.		TEST PCT.		FRE5H YEAR	RECOROS NO.		TEST PCT.		305-0AY (RECORUS NO.	ONTEMP MILK LB.	FAT	YEARLY HI RECOKOS NO.		FAT
							HOLST	TEIN								
889161	17	24	11120	4.0	436	1955 1956 1957 1958 1959 1960	2 5 2	12035 14700 10854 13035 11309 11047	3.8 3.6 4.0 3.9 3.9 3.9	460 532 422 505 442 426	2 5 1 9	13070 14315 12690 12580 12366 10335	499 554 473 488 474 424	1 1 4 1 9 3	10235 11630 11287 13036 12999 13581	
889312	Ц	В	11976	3.B	449	1957 1958 1959 1960	2 3 2 1	12380 12517 9565 10910	3.4 3.8 3.7 4.1	424 475 352 451	2 2 1 1	11785 12625 11160 13890	438 483 443 551	2 2 2 1	10219 13299 12982 13712	377 506 502 525
890181	3	5	13245	4.3	568	1958 1959		13957 11980	4.3 4.3	606 506	3 2	12107 11795	49 1 449		12462 11898	
891636	4	8	13239	3.8	510	1953 1954 1955 1956 1958 1959	1 1 3 1 1	10750 13400 11747 14460 14230 17090	3.2 3.5 3.7 3.5 3.5 4.1	348 475 441 506 498 702	1 1 3 1 1	13220 14320 12700 13880 13400 15110	452 497 477 498 491 592	1 1 3 1	15 195 15 097 1 12 85 1 4 7 4 8 1 3 3 7 4	568 554 433 534 494
893550	2	3	11825	4.4	514	1951 1952	2	11655 14210	4.5 4.0	511 575						
89363B	2	2	13450	3.8	504	1959	2	13450	3.B	504	2	10305	395	2	11009	405
ს9 /7 89	24	58	10895	3.B	† 1 †	1952 1953 1954 1955 1956 1957 1958 1959		10863 11214 9994 11108 11095 12807 12600 14140		400 427 382 424 423 501 499 503	9 16 10 10 4 3 1	11397 11621 10976 11125 10403 11630 13990 11940	407 437 411 426 382 419 529 431	17 8 10 4 3	10845 11087 10693 11325 11492 13058	424 410 421
897933	1	2	12555	3.B	466	1951 1953	1	13440 11670		493 438	1 1	12540 10450	459 380			
B98193	10	25	13584	3.6	491	1949 1951 1952 1953 1954 1955 1956 1957	3 4	12420 11155 13890 14413 12558 13402 14685 16230 11710	3.6 3.5 3.5 3.8 3.6 3.8 3.8	451 401 478 510 480 482 550 606 406	2 4 5 5 2 2	11660 11910 11698 11798 12568 14095 14545	461 467 464	5 5 2	11249 11794 11467 12938 13832 14028	463
898470	1	4	9593	3.9	373	1948 1949 1950 1951	1 1 1 1	11520 8480 11260 7110	3.5 4.0 4.3 3.8	406 337 481 269						
900274	łą	6	11314	4.0	453	1957 1958 1959	1 2 3	10850 12475 11257	4.3 4.2 3.9	462 517 436	1 2 3	12470 11335 10573	516 448 392	2	11587 10971 10533	427
901445	6	12	14235	3.6	512	1951 1952 1954 1955 1957 1958 1959	1 1 1 1 3 2 2 2	12230 9230 16330 12740 16400 13760 15500 14680	3.5 3.7 3.4 3.5 3.7	449 322 600 437 572 493 536 544	1 1 3	14600 12700 14250 12363 13230 12310	598 516 556 482 504 469	1 1 1 3 2 2		573 593 486
902500	2	2	13885	3.4	472	1957 1958	1	10910 16860		370 574	1	13350	515	1	14116	546
9029 15	3	5	10525	3.9	405	1956 1957 1958 1959	1 1 1 2	7380 10460 12240 10915	4.0	295 430 488 412	1 1 1 2	14280 14640 13580 14135	543 544 524 606	1 1 1 2	1293B 13832 14083 14116	
903537	2	3	11160	3.B	429	1954 1955 1959	1 1 1	10580 5160 14450	3.7 3.4 4.0	391 177 574	1 1 1	11790 13150 14180	467 504 558	1 1 1	11794 11467 14344	463 453 548
904220	3	3	13840	3.7	523	1956 1958	2	9560 22400		343 884	2	10270	414	1	10072	407
904B 9 1	2	6	12078	3.7	437	1954 1955 1956 1957 1958 1959	1 1 1 1 1	8240 8850 10140 11070 11880 14120	3.3 3.9	317 352 338 430 419 503	1 1 1 1	7060 10310 10310 10440 14650	326 405 391 408 579	1	9341 10224 11685 10944 14497	
905683	8	14	14954	4.0	590	1955 1957 1958	2 2 3	16355 17190 15373	3.9	641 657 597	2 2 3	13270 14760 13207	513 561 513	2 2 2	11467 13832 14737	534

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

					ROS FR		STATE ON				5.15.61.51. 1 .10					
	JAUGHIEK	AVERAGE	BA 211	€E		к	FCOKD AV	LKAGE E	14 21K	L BY	FRESHENING		. AV.	YEARLY H	FRO AVE	RAGE
SIKE DA	NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.	LB.	TEST PCT.	FAT LB.	RECORDS NO.	MILK LB.		RECOROS NO.		
						1959	HOLS 7	TEIN 14523	4.0	578	7	14757	564	7	14359	549
906000	10	17	12031	4.0	479	1954 1955 1956 1957 1958 1959 1960	1 1 1 5 5 3	10210 11440 8820 10210 12870 12146 10537	4.2 4.3 4.0 4.5 4.1 4.0 4.1	426 487 355 457 524 477 436	1 1 1 5 5 3	10080 10400 9650 11120 12430 11602 11217	401 410 369 479 489 469 452	1 1 1 5 5 3	8818 9668 10115 10900 13019 11223 10900	382 402 413 427 516 427 448
909229	1	1	10360	4-4	452	1959	1	10360	4 - 4	452	1	12740	455	1	15238	502
910027	2	3	14603	3.9	572	1959 1960	2 1	14520 14100	3.9 4.2	566 598	2	15100 14980	585 568	2	146 9 9 14214	558 546
910029	12	28	13400	3.9	514	1953 1954 1955 1956 1957 1958 1959	2 8 6 5 1 - 2 4	12560 11883 11693 12796 9360 15125 17418	4.0 3.9 4.2 4.0 4.0 4.1 3.8	500 466 483 505 371 602 656	2 8 5 1 2 4	11970 11999 13535 14358 14650 15560 14600	467 454 526 544 545 584 570	2 8 6 5 1 2 4	11249 11794 11467 12938 13832 14028 14481	451 463 453 499 534 531 551
910630	1	1	14030	3.8	531	1957	1	14030	3.8	531	1	16710	632	1	14661	569
910774	14	10	11512	3.9	451	1951 1952 1953 1954 1955 1956 1957	2 1 2 2 1 1	11600 14990 13875 9930 9330 10710 13430	4.0 4.0 3.9 3.9 4.2 4.2	461 599 538 381 392 452 570	1 1 2 2 1 1	11620 11890 11800 11735 13120 14120 14750	447 459 470 467 503 535 563	2 2 1 1	11249 11794 11467 12938 13832	451 463 453 499 534
916471	1	1	14160	3.6	506	1959	1	14160	3.6	506	1	13210	486	1	15282	569
∲18977	27	82	1203ช	3.6	433	1951 1952 1953 1954 1955 1956 1957 1958	3 21 22 12 9 6 4 3	10870 11594 11976 12003 13446 12358 15300 12587 17335	3.3 3.7 3.6 3.5 3.5 3.5 3.5 3.4	360 429 427 419 463 433 503 445 580	2 18 21 11 9 5 4 3 2	12615 11712 11692 12162 13526 12446 15100 12973 14110	470 435 439 453 507 476 549 507 524	19 9 7 5 3 1 2	11525 12564 12236 12986 13883 13036 13821	438 479 470 497 529 495 508
920562	7	11	11453	3.6	417	1954 1955 1957 1958 1959 1960	1 3 2 2 2 2	11260 11757 13180 10340 12180 14260	3.8 3.5 3.7 3.7 3.8 4.0	429 411 487 385 458 565	1 3 2 2 2 2	12220 11453 12105 10610 12035 13660	440 446 432 389 467 526	1 1 2 2 1	12154 11064 9570 12497 12851	455 398 372 469 500
920871	190	401	11304	3.8	432	1953 1954 1955 1956 1957 1958 1959	25 77 93 72 58 41 32 3	10506 10639 11282 12045 11858 12639 12882 12873	3.8 3.9 3.8 3.8 3.8 3.7 4.0	405 411 433 460 450 489 480 506	25 76 93 71 56 39 31	11606 11375 11544 12311 12427 11993 13095 14800	427 423 433 456 465 461 486 535	24 61 86 67 53 34 32 2	12328 11177 11467 11941 12135 12699 13296 14852	452 416 430 452 455 480 499 568
921170	1	1	8270	3.7	307	1955	1	8270	3.7	307	1	12720	464	1	13865	50გ
921853	1	1	9110	3.9	35 1	1958	1	9110	3.9	351	1	12120	437	1	11194	432
922288	11	16	13366	3.6	473	1958 1959 1960	8 6 2	10924 15222 11760	3.7 3.4 3.8	399 518 443	7 6 2	11009 13650 12065	399 504 421	6 5 2	10509 13006 11620	399 483 425
923314	1550	2732	12431	3.8	466	1953 1954 1955 1956 1957 1958 1959	29 223 421 446 454 528 554 77	11407 11860 11665 12348 12833 13162 13194 12785	3.8 3.8 3.6 3.7 3.7 3.8 3.8	436 449 438 459 470 495 494 477	29 212 399 431 413 484 533 74	11272 11841 11653 12459 12689 12474 12227	427 436 432 461 473 472 464 451	25 207 361 408 386 435 484 64	11737 11901 11344 12198 12759 13046 13047	446 446 424 460 479 491 495
925318	7	14	13018	3.6	462	1954 1955 1956 1957 1958 1959	1 2 5 3 1 2	14050 15130 13390 13247 16130 12665	3.5 3.6 3.7 3.3 3.4 3.5	498 536 495 440 551 441	1 2 5 3 1 2	12070 12400 12516 14790 15570 14655	466 473 494 568 589 566	1 2 5 3 1 2	11794 11467 12382 13832 14879 14344	463 453 477 534 538 548
925749	1	1	9210	4.0	373	1955	1	9210	4.0	3/3	1	9010	309	1	922 I	330
9245 64	6	10	15765	3.7	585	1955 1956 1957 1958 1959	1 1 2 3 3	16820 18520 14410 14100 15600	3.7 3.6 3.5 3.6 3.8	621 668 502 511 592	1 1 2 3 3	12830 14380 13730 12870 11760	528 543 522 501 475	1 1 2 2 3	12699 12938 13533 14661 12121	516 499 532 545 489

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREŁOING ORGANIZATIONS--GROUPEO BY BRÉŁO,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY SIE	RE		R	ECORO AV	ERAGE 8	Y SIR	E 8Y	FRESHEN1NG	YEAR				
SIRE	DAUGHTERS	RECOROS		TEST	FAT		RECORDS				RECORUS	MILK	FAT	YEARLY HI	MILK	FAT
NO.	NO.	NO.	L8.	PCT.	L8.	YEAR	NO.	LB.	PCI.	L8.	NO.	LB.	L8.	NO.	L8.	LB=
924893	1	2	15240	3.6	541	1955	1	17920	3.5	628	1	13500	475		16306	595
926101	89	281	12040	3.6	428	1958	1	12560	3.6	454 628	1	12150	442	·	11445	425
, 20101		201				1950 1951	26 64	11842 12039	3.6 3.6	425 428	16 41	11646 11006	439 423			
						1952 1953 1954	51 47 34	12148 11956 12511	3.5 3.5 3.5	430 418 437	39 44 34	11369 10772 10812	436 407 419	43 30	10790 10784	409
						1955 1956	24 13	12918 12983	3.6 3.6	462 466	24 13	10964 11610	420 451	19 13	10454 11439	401 443
						1957 1958 1959	9 6 4	13510 12488 12965	3.6 3.4 3.6	482 424 472	8 5 3	13238 12836 13103	516 501 529	7 5 4	12501 12492 12 7 58	478 485 479
					. 7.0	1960	i	1120	4.0	45				i i	11467	435
926363	2	3	11603	3.7	430	1955 1956	1 2	9505	3.8 3.5	523 336	1 2	14260 12755	512 498	1 2	12982 11903	452 471
928378	3	3	10540	3.6	376	1958 1959	1	14040	3.3	467	1	13200	485 656	1	12600	462 629
929962	13	15	15063	3.7	556	1960 1957	3	6050	3.5	211 576	3	5600 14910	228 556	3	8088 13832	319 534
						1958 1959	5	15701 15160	3.6 3.8	573 566	7 5	14931 13932	559 540	7 5	14105 13782	529 527
931267		1	14440	3.5	506	1959	1	14440	3.5	506	1	13610	511	1	14900	573
934577		9	1040	4.3 3.7	45	1960	1	1040	3.6	45 388	2	14980	485	1	14214	546
730110	J	·	10711	341	400	1952 1953	1	10740 10000	3.6 3.5	384 348	ī	12280	435			
						1954 1955 1956	1 2 1	11170 10945 14380	3.4 3.9 3.6	383 420 518	1	9550	303			
938034	1	2	13575	3.5	466	1959	!	14490	3.4	495	1	14650	579	!	14606	555
938082	1	1	13460	4.0	534	1960 1959	1	12660	3.5	437 534	1	16500	638 590	1	14214	546 558
941780	4	5	11519	3.6	414	1951 1958	1	8370 16010	4.0	337 571	1	11960 12180	437 448	1	13331	486
						1959	3	12527	3.5	433	3	11550	437	2	12274	469
942029	148	209	12245	4.0	483	1956 1957 1958	10 51 66	12791 11589 12373	3.9 4.0 4.0	499 458 494	10 47 60	14820 12565 12173	545 471 462	9 4 1 53	14072 12577 13009	529 474 490
						1959 1960	73	12649	3.9	492 459	73	12604 12296	476 455	67	13030	493 515
943799	1	3	14000	4.2	592	1956 1957	1	15760 13930	4 • 1 4 • 3	648 599	1	10260 11090	400 451	1	10115 11619	413 484
01-401-7	7	1.7	10:17		301	1958	1	12310	4.3	528	i	11320	477	1	11696	491
946847	3	13	10537	3.7	391	1950 1951 1952	1 1 2	11470 14190 11670	4.1 3.9 4.1	473 559 479	1 1 2	11180 13090 12760	384 472 486			
						1953 1954 1955	2 2 1	9070 9635 6960	4.2 3.9 3.7	380 379 259	2 2 1	13760 13155 12250	507 485	2 2 1	12208 12219 10017	464 457 380
						1956 1957	1	8440 4840	3.7 3.8	316 182	1	11330 10270	436 385	i	10867 12230	422 480
949094	5	۰	10806	3.7	30п	1958 1954	2	9020		304 668	2	11905	505	2	11178	433
	,	·	10000	3.1	3,4	1956 1957	i 1	10080 11720	3.6 3.7	36 7 431	i 1	12320 12510	467 465	1	12535 12121	457 445
						1958 1959	3	9777 11157	3.7 3.7	356 408	3	136 <i>1</i> 3 11843	502 433	2	12945 12699	476 469
949139		1	14740		640	1959	1	14740	4.3	040	1	15330	594			
949159	14	6	11102	3.6	391	1957 1958 1959	2 1 3	12830 12480 10720	3.5 3.1 3.6	444 390 382	2 1 3	12150 11180 10560	461 417 397	1 1 3	14573 12666 12001	542 458 441
95 1058	1	1	14600	3.4	494	1960	1	14600	3.4	494	1	12940	497	1	12938	507
95 12 53	1	2	9115	3.6	320	1952 1953	1	9480 8750	3.4 3.7	3≥0 320	1	13პა0 13590	501 509	1	13287	499
952029	1	1	9080	3.8	344	1959	1	9080	3 . 8	344	1	13010	526	1	14595	565
952421	3	3	15933	3.7	591	1957 1958	1	20660 11060	3.6	744 397	1	14540 15620	54 I 590	1	13832 14020	534 531
954461	5	9	12609	3.8	485	1959 1956	1	16080 9570	3.9	633	1	15540 10850	590 435	1	14661	557
						1957 1958	3 2	12067 13020	3.9 3.8	468 496	3 2	10453 10685	433 435	3 2	10413 10508	427 429
						1959 1960	1	13840 10250	3.5	531 357	2	10370 10220	423 396	1	9821	458 387
955493	8	9	10364	3.9	404	1957	1	9800	3.6	352	1	11200	403	1	11249	411

TABLE 15.--DAUGHTEK-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIR.: NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT	305-0AY RECORUS NO.			YEARLY H RECOROS NO.		
						1959 1960	HOL \$1 35 3	TEIN 12711 9640	4.1 3.6	513 356	35 3	12698 8267	475 330	33 3	13421 11975	502 452
978750) 16	26	11957	3.8	454	1956 1957 1958 1959 1960	2 2 8 10 4	8970 11240 11599 12998 12270	4.3 4.4 3.9 3.7 3.0	388 490 444 481 462	1 2 8 10 4	12000 11320 12443 12346 13095	460 453 462 466 508	1 2 8 10 4	10115 10350 12282 12405 13233	413 407 469 479 529
981308	3 1	1	11270	3.6	411	1959	1	11270	3.6	411	1	11850	453	1	12241	481
984799	7	9	11813	3.9	460	1958 1959 1960	3 4 2	13047 13003 9370	4.1 3.9 3.6	539 507 338	3 4 2	12397 10813 5670	476 429 212	3 4 2	13193 11720 9668	495 455 373
987081	1	3	14563	3.4	489	1950 1952 1953	1 1 1	16850 12240 14600	3.3 3.6 3.2	562 443 463	1 1 1	13740 12910 13900	482 463 500	1	13669	494
987869	519	850	12076	3.8	45 4	1954 1955 1956 1957 1958 1959	5 79 129 155 194 251 37	12012 11131 11704 12190 12553 12442 11668	3.8 3.8 3.7 3.7 3.7 3.8 3.8	448 416 428 452 468 473 439	5 77 127 148 190 247 33	12042 11524 12358 12283 12191 12563 11959	449 424 457 461 464 473 449	3 71 123 136 172 221 30	11118 11390 11911 12375 13047 13011 13193	420 423 443 466 489 494 505
988462	2 1	1	10190	3.9	396	1959	1	10190	3.9	396	1	9410	394	1	11325	458
¥89939	24	26	12273	4.0	487	1958 1959 1960	7 16 3	13496 12024 12177	3.9 4.0 4.0	521 485 484	7 16 3	14974 13217 15540	565 495 592	7 14 3	14444 13439 14134	542 509 542
990221	I iş	6	13199	3.7	491	1952 1953 1957 1958 1959	1 2 1 1	10810 13030 17730 13310 14260	3.3 4.2 3.5 2.9 3.3	356 545 628 387 476	1	11280 11470 11380 12960	435 425 421 490	1 1	11303 12611 12121 12339	429 470 436 463
993764	5	5	11796	3.9	453	1957 1958	2	11896 11733	3.8 3.9	448 457	2	12965 11557	503 461	2 3	1164 <i>2</i> 11558	456 441
995619	2	2	11865	3.8	443	1958	2	11865	3.8	443	2	13225	504	2	13282	504
996252	2 2	3	14738	3.7	5 36	1958 1959	2	14535 13180	3.7 3.6	530 474	1	11930 10570	431 384	1	11816 10911	435 397
99748	1 10	11	12178	3.8	457	1958 1959 1960	ડ ધ 4	13987 10085 13403	3.8 3.7 3.8	537 363 508	2 4 4	13420 11570 12378	530 430 483	3 3 4	12815 11503 12758	491 434 489
999438	37	83	12800	3.8	480	1952 1953 1954 1955 1956 1957 1958 1959	2 11 14 14 13 9 9	10420 12420 12457 11816 13569 15663 14189 12659	3.7 4.0 3.8 3.8 3.7 3.8 3.7	382 490 470 447 498 590 517 471	2 11 14 14 13 9 9	11735 11820 11756 12729 13998 14766 14274 14702	456 470 465 485 537 559 552 562	11 14 14 13 9 7	11249 11794 11467 12938 13832 14352	451 463 453 499 534 542 542
1000390) 1	1	10970	4.2	466	1959	1	10970	4.2	466	1	11660	451	1	12241	481
1001502	2 71	102	11876	5.7	441	1956 1957 1958 1959 1960	5 10 21 54 14	9773 10406 12903 12265 11834	3.6 3.6 3.8 3.6	351 365 469 460 425	3 8 20 53 12	11007 11978 11970 11554 11002	388 424 454 445 419	3 7 17 49 13	10933 12801 12893 12436 12880	395 456 479 469 482
1001513	2 4	6	9410	4 - 4	418	1957 1958 1959	1 3 2	8170 8993 11965	4.5	347 409 502	1 3 2	11440 10613 10280	455 433 449	2 2	10895 11173	437 471
100423	2 5	6	11323	14 . 14	490	1956 1957 1958 1959	1 3 1	10480 11860 10360 11390	4.5 3.7	489 528 381 551	1 3 1	10060 12450 8660 10150	414 506 363 366	1 3 1 1	10072 11587 8687 9679	
1005575	5 2	2	12500	5.9	475	1957 1958	1 1	11070 13930	4.3 3.4	473 477	1	12460 11580	515 471	1	11587 12731	467 470
100656	4 2	2	10935	4.1	453	1957 1959		9640 12230		353 552	1	14940 14660	564 579	1	13832 14606	534 555
100686	6 1	1	13470	5.5	478	1959	1	13470	3.5	478	1	10440	392	1	9123	370
100719	lş lş	5	13718	3.8	527	1958 1959	2	13855 13033		491 525	2	12290 10927	455 422	1 3	12535 13044	452 508
100766	0 3	14	13303	5.9	517	1958 1959	i 3	7500 13497	3.9	293 525	1 3	10350 13190	401	1 3	10072 13734	336 5∠7
100856	5 3	I	12158	3.3	405	1956 1958	1	9840 16230		346 340	1	14500 14500	505 541	1	16328 13036	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	8Y 216	RE		R	ECORO AVI	ERAGE E	SY SIR	E 8Y	FRESHENING	YEAR				
SIKE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOKOS NO.		TEST PCT.	FAT L8.	305-DAY (RECDRDS NO.			YEARLY HE RECORDS NO.		
						1959	HOLS	TEIN 12215	3.3	398	2	12755	464	2	12726	470
1008622	2 3	3	9793	4.1	404	1956 1957	1 2	7006 11190	3.7 4.3	262 476	1 2	12660 12700	502 511	1	11903 11587	471 467
1011980) 4	4	13298	4.2	550	1959	4	13298	4.2	550	4	14313	550	4	13707	527
1012593	3 2	2	122 10	3.8	467	1959	2	12210	3.8	467	2	10065	380	2	10742	410
1015760	3	3	14907	3.7	541	1957 1958 1959	1 1 1	16150 16180 12390	3.5 3.2 4.4	561 521 540	1 1 1	14920 11620 12560	552 414 452	1 1 1	13832 11718 13156	534 421 488
1017797	7	15	148n3	4.0	592	1956 1957 1958 1959 1960	2 3 4 5 1	1547 0 15467 13503 15256 13520	4.2 3.9 4.1 3.8 4.0	652 611 544 582 538	2 · 3 · 4 · 5 · 1	14380 14733 15583 14672 12140	541 547 590 565 459	2 3 4 5	12938 13632 14560 14068	499 534 550 539
1019585	j 1	1	10410	3.4	356	1958	1	10410	3.4	356	1	11060	425	1	11249	424
1019847	' 1	1	10390	3.8	396	1953	1	10390	3.8	396	1	13460	505	1	13244	501
1020277	, if	5	9845	4.1	401	1956 1957 1958 1959	1 1 1 2	9680 7500 12070 10520	4.2 4.0 4.0	403 314 486 414	1 1 1 2	12560 8900 12500 11805	497 358 516 453	1 1 1 2	11903 8066 12328 12328	471 346 499 487
1022593	3 1	2	5530	4.0	220	1955 1956	1	5910 5150	4.0 3.9	239 200	1	8370 7850	296 300	1	9647 7347	363 262
1022601	2	3	12853	3.8	476	1957 1959 1960	1 1 1	14150 11820 13620	3.6 3.9 3.6	506 456 485	1 1 1	15680 15570 13430	629 591 508	1	14737 13091	558 517
1023347	263	328	12284	3.8	459	1957 1958 1959 1960	12 121 151 44	12554 12263 12454 12521	3.8 3.6 3.7 3.8	480 460 458 470	11 116 147 44	11981 12549 12302 11624	462 483 465 442	9 100 139 36	11881 12752 12796 13243	462 485 486 505
1024453	s 1	1	8130	3.6	291	1957	1	8130	3.6	291	1	12750	434	1	13015	481
1025792	. 5	9	13308	3.9	513	1951 1953 1954 1955 1958 1959	1 2 1 2 1 2	8970 12020 6770 10515 12530 19260	3.6 3.9 3.6 3.9 3.7 3.9	319 467 255 399 470 742	2 1 1 2	12320 7770 9480 11730	468 263 368 447	1 1 1 1 2	10083 8393 12600 10431 12339	411 318 474 411 474
1026115	5 9	10	13044	4.0	524	1957 1958 1959 1960	1 5 3 1	12250 14458 11413 10920	4.0 4.1 3.9 4.0	489 593 447 437	1 5 3 1	16100 13450 13447 13180	646 512 507 545	1 4 3 1	16372 14421 13276 13690	640 563 511 550
1026170	1	1	9630	4.1	397	1958	1	9630	4.1	397	1	9650	412			
1028123	3 4	6	14498	3.7	527	1958 1959	5 3	14563 14170	3.6 3.7	521 525	3 3	14863 14737	558 563	2	14737 14132	557 542
1029279	20	20	12790	3.7	467	1959 1960	15 5	13174 11638	3.6 3.8	478 432	15	12848 12828	494 482	13	13392 13895	497 526
1036404	5	6	11516	3.5	402	1958 1959 1960	1 14 1	11760 11433 11610	3.3 3.5 3.6	383 400 418	1 4 1	11120 12838 12150	408 473 468	1 4 1	9777 13560 11641	375 519 445
1030640	3	4	13897	3.5	482	1959 1960	3 1	13727 14590		475 505	3	12460 12160	468 495	3	13592 12502	524 502
1031501	4	7	12269	4.0	484	195 <i>7</i> 1958 1959	1 2 կ	11790 13055 12355	4.1 3.5 4.0	487 462 490	1 2 4	11310 11595 12935	406 432 481	1 2 4	10311 12045 13571	390 443 501
1032311	5	14	12244	3.8	466	1955 1956 1957 1958 1959	2 3 3 3 3	11930 11023 13510 13817 11580	3.7 3.7 3.8 3.8 3.8	435 407 511 525 442	2 3 3 3 3	11150 12023 12097 12160 11887	397 432 444 461 443	2 3 2 3 3	11238 11336 12721 12865 12328	392 408 464 482 462
1032815	2	2	11550	4.0	468	1959	2	11550	4.0	468	2	11650	429	2	11369	426
1033908	3 4	5	11303	4.0	442	1958 1959 1960	1 3 1	7910 12653 9550	4.2 3.9 4.0	330 494 377	1 3 1	11930 11593 11990	468 459 471	1 3 1	12731 11939 11260	470 467 437
1034466	5 1	2	11925	3.7	442	1958 1959	1	11800 12050	3.6 3.8	423 461	1	11610 11100	473 403	1	11707 10998	447 414
1034467	5	5	13730	4.1	554	1959	5	13730	4.1	554	5	14868	581	14	14426	550
1034472	2 10	22	10854	4.1	443	1952	1	7100	3.8	272	1	11650	394			

TABLE 15---DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE

	OAUGHTER	AVERAGE	8A 214	RE		R	LCGRO AVI	RAGE	SY SIK	F 8A	FRESHENING	YEAK				
'S1RE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	SOS-DAY RECURDS NO.	MILK		YEARLY HI RECORDS NO.		FAI
						1953 1954 1955 1956 1957 1958 1959	HOLS: 3 2 2 3 1 3 5 2	10330 9795 10130 11680 14110 12113 10250 11680		400 367 390 472 656 503 424 478	3 2 2 2 1 2 4	11863 11390 12150 12340 12620 10880 11355 11910	429 414 441 460 461 435 444 457	3 2 2 2 2 1 4	11082 11865 11140 11772 12055 11549 11968	423 439 408 451 468 446 469
103/45	1 1	1	7500	4.3	325	1959	1	7500	4.3	325	1	14680	552	1	14214	543
103811	8 24	26	12111	4.2	507	1958 1959 1960	1 18 7	13210 12414 11270	4.2	521 520 469	1 16 7	13480 13913 12100	499 522 460	1 15 7	14671 13802 12907	547 513 491
103859	1 10	21	12162	4.1	496	1952 1953 1954 1955 1956 1957 1958	2 2 2 3 2 4 4	14700 13315 10385 10767 13485 13515 13965 13568	4.1 4.2 3.8 4.1 4.3	600 541 431 403 546 576 574 564	1 2 2 3 2 2 4	13680 10755 14775 10070 13255 12265 13353 11855	588 408 584 383 514 461 513 452	1 1 3 4	12927 10235 13560 12666 12173	486 396 530 487 473
104155	9 2	3	13208	4.0	524	1958 1959	2 1	13205 14250	4.0 4.0	522 572	2 1	13275 14560	497 551	1	15674 16154	605 629
104421	8 1	6	12780	3.6	454	1953 1954 1955 1956 1957 1958	1 1 1 1 1	10710 10280 7560 15920 13670 18540	3.0 4.0 3.5	383 370 300 556 489 626	1 1 1 1	9710 9300 14120 14160 14390	455 375 546 586 634	}	13647 14661 15674	534 569 605
104564	7 3	3	12447	4.0	14914	1958 1959	1 2	11430 12955	3.8 4.1	433 524	1 2	10340 12105	38 I 4 3 I	1 2	9570 12290	372 459
104867	8 35	57	13713	3.9	533	1954 1955 1956 1957 1958 1959 1960	3 (9 (6 22 3	13480 13337 14328 14433 13282 14210 10380	3.9 3.9 4.0	544 514 560 573 533 551 394	3 7 9 7 5 22 1	11623 12796 14109 14899 14450 14410 16590	464 487 535 557 554 558 640	3 7 9 7 4 22 3	11794 11467 12938 13832 14418 14108 14214	463 453 499 534 545 546
104954	7 2	2	15885	3.7	581	1959	2	15885	3.7	581	2	14380	554	2	13974	534
105440	6 4	6	11163	4 - 1	445	1957 1958 1959	1 1 4	14110 15330 11198	3.7	525 563 452	1 1 4	12510 12980 12445	472 513 477	1 1 3	12034 14007 13374	444 540 516
105548	3 3	4	9657	3.8	364	1959 1960	3	9187 11180		338 444	3 1	13433 12470	473 458	2 1	12715 12917	468 461
165688	2 21	30	12882	3.8	490	1958 1959 1960	11 15 1	13670 12930 15710	3.8	506 495 602	11 18 1	13455 12552 13360	512 478 503	10 18 1	13198 12525 13985	504 482 521
106191	1 1	1	12320	3.8	464	1960	1	12320	3.8	469	1	13700	491	1	12491	469
106323	7 1	1	18160	3.8	692	1959	1	18160	3. გ	692	1	15620	579	1	16154	629
106338	1 2	2	11240	4.2	465	1959	2	11240	4.2	465	2	13700	545	2	13260	518
107097	8 8	22	15239	3.9	593	1953 1954 1955 1956 1957 1958 1959	1 3 6 4 2 4 2	11720 13013 14472 15300 14650 15545 18520	3.9 4.0 3.4 4.1	472 503 557 613 496 631 758	1 3 6 4 2 4 2	11630 11660 12612 14115 14570 14020 15205		1 3 6 4 2 3 2	11249 11794 11467 12938 13832 14264 14329	451 463 453 499 534 539
107627	3 I	2	13605	3.4	460	1958 1959	1	14550 12660		477 443	1	10770	403	1	13581	484
108127	0 4	5	12628	8 . د	471	1958 1959	1	17340 13003		559 488	1 4	12180 11955	395 434	ц	12053	447
108168	4 1	2	9200	3.7	338	1955 1956		9860 8540		361 314	1	10/20 10590	432 415	1	9668 10115	402 413
108197	1 11	12	14969	3.8	565	1955 1956 1957 1958 1959	3 3 2 1 3	13673 14010 16215 17370 14907	4.0 3.8 3.5	505 565 603 607 567	3 3 2 1 3	13393 14100 13925 15560 15087	520 536 539 588 580	3 3 1 1 3	11467 12938 13832 14879 14668	453 499 534 558 557
108546	2 2	2	10165	4.2	422	1959	2	10185	4 - 2	422	2	14010	551	2	13560	524
108597	8 4	i,	15333	3.5	531	1959	4	15333	3.5	531	Ц	14578	566	3	14130	536
108797	4 3	5	12748	3.7	472	1958	2	13800	3.0	493	2	12035	491	2	12530	485

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGL	BY SI				ECURU AVE		SY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	UAUGHTERS NO.	RELOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECUROS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.			YEARLY HI RECORDS NO.		
						1959	HOLST		3 4	361	1	11680	14 14 14	1	11914	458
						1960	1 2	10860 13340	3.3 3.9	361 518	2	10915	421	2	10513	412
1088709) 1	2	12295	3.5	427	1954 1955	1	11920 12670	3.5 3.5	413 441	i 1	9990 10290	406 414	i 1	8818 9668	332 402
1090996) 1	1	11300	4.1	462	1959	1	11300	4.1	462	1	12840	458	1	15238	502
1093670) 1	1	6590	3.5	229	1956	1	6590	3.5	229				1	11107	368
1094213	3	3	13200	3.9	516	1957 1959	1 2	14870 12365	3.7 4.1	548 501	1 2	10090 9905	39 I 383	1 2	12164 9990	402 302
1094921	3	3	11643	3.9	445	1958 1959	1 2	13850 10540	3.6 4.0	496 419	1 2	13820 10625	509 386	1	14246 10420	530 405
1098258	91	91	12199	3.7	456	1959 1960	60 31	12478 11658	3.8 3.7	471 428	56 29	12875 11503	486 433	56 29	13674 13930	522 526
1100193	3 74	90	12365	3.8	467	1958 1959 1960	13 68 9	10938 12552 11269	3.9 3.8 3.7	420 472 418	13 67 9	12836 12771 11926	495 488 455	10 61 8	12777 13159 13098	486 497 503
1 1053 16	17	21	14586	4.0	579	1958 1959 1960	7 13 1	15086 14970 580	4.0 4.2	596 599 24	13	149/1 14498	570 560	7 13 1	14452 14124 14214	544 539 546
1106775	5	7	12512	3.7	462	1958 1959 1960	3 3 1	11260 12683 14570	3.8 3.6 3.7	421 460 536	3 3 1	13133 10340 12860	495 380 480	3 3 1	12397 11180 12655	462 416 472
1107436	28	49	12750	3.7	#64	1954 1955 1956 1957 1958 1959 1960	4 5 6 4 12 17 1	13073 11520 11302 13113 13162 13481 8120	3.5 3.7 3.8 3.7 3.7 3.6 3.4	462 425 421 481 486 475 272	4 5 6 3 11 17	13295 13374 14370 14760 13565 13142 11810	474 487 512 540 493 471 393	4 5 6 3 12 16 1	15097 11794 14748 13712 13155 12480 14290	554 438 534 499 486 461 528
1110011	1 4	5	12426	3.6	440	1958 1959	2	10570 12553	3.3 3.7	344 469	2 2	11280 11280	448 409	3	11151	437
1111075	10	14	12159	3.8	457	1958 1959	2 9	11990 11848	3.9 3.8	458 446	2	11965 12168	458 460	2 8 2	10753 12207	409 465 474
1111076	5 4	5	12431	3.7	454	1960 1958 1959 1960	2 2	12687 11045 14550 10460	3.8 3.8	465 412 538 392	2 1 2	10390 14350 12095 11130	419 548 461 394	1 2	12312 14355 13080	552 490
1113278	3	3	11203	4.0	450	1958 1959 1960		10760 12610 10240	3.7 4.5 4.1 3.5	482 512 357	1 1 1	15730 14770 8120	594 581 293	1	15761 15271 11761	596 609 408
1118017	1	2	16540	3.8	625	1959 1960	!	17890 15190	3.7 3.8	668 582	1	13550	482	1 1	14966 16023	570 610
1118413	3 2	2	12965	3.9	492	1959	2	12965	3.9	492	2	12325	473	2	12475	482
1119514	12	15	12535	3.5	441	1958 1959 1960	1 10 4	13400 13279 9903	3.6 3.6 3.4	481 469 334	1 10 4	11000 12001 10418	385 446 391	1 9 4	10846 12300 13519	412 455 510
1122266	5 1	1	10170	4.3	435	1960	l.	10170	4.3	435	1	19300	649	1	15979	609
1124920) 1	1	11140	3.7	415	1959	1	11140	3.7	415	I	14200	559	1	14606	555
1125395	5 8	10	11979	3.6	436	1958 1959 1960	2 7 1	12535 12069 11190	3.9 3.6 3.3	464 431 374	2 7 1	15615 12710 12800	589 463 609	2 5 1	14792 12374 13211	554 462 486
1129309) 1	1	10920	3.7	405	1957	1	10920	3.7	405	1	14930	564	1	13832	534
1132993	3 9	14	12428	3.8	478	1957 1958 1959 1960	1 6 6 1	11700 12762 12807 12100	3.8 3.8 3.9 4.4	444 487 501 529	1 5 6 1	13760 11442 11252 12570	485 438 424 468	1 5 6 1	12949 11340 12063 12415	467 433 455 472
114076	3 1	1	15610	3.7	578	1959	1	15610	3.7	578	1	14970	568	1	13974	534
1 14 35 78	3 2	2	12340	4.2	50>	1959	2	12340	4.2	505	2	15105	571	2	14672	557
1148207	7 7	15	13760	3.6	499	1955 1956 1957 1958 1959 1960	1 2 3 5 3 1	10800 13530 13397 13290 13710 14470	3.7	387 491 500 493 470 506	1 2 3 5 3 1	13110 14240 14603 13148 13430 16450	503 542 551 510 510 636	1 2 3 4 3 1	11467 12938 13832 13263 12924 14214	453 499 534 507 496 546
114958	4 I	1	14080	3.8	539	1959	1	14080	3.8	539	1	12500	452	1	13385	495
1153740	D 1	1	4340	4.0	174	1959	1	4340	4.0	174	1	12590	425	1	10301	362
115481	7 15	18	14214	3.8	532	1955 1956 1957 1958 1959	1 1 1 2 11	11280 15340 15570 15515 14319	3.9 3.6 3.5	465 594 568 532 545	1 1 1 2 11	13110 14220 14920 15570 14596		1 1 1 2 11	11467 12938 13832 14748 14254	453 499 534 553 544

TABLE 15.--GAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING UNGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KLCOROS NO.		TEST PCT.	FAT L8.	JOS-DAY RECURDS NO.	CONTEMP MILK L8.	FAT L8.	YEARLY H RECORDS NO.	EKD AVE MILK L8.	
						1960	HOLS	TE IN 14085	3. ა	522	2	16530	638	2	14214	546
115605	9 5	5	10268	3.9	393	1958	2	10950	3.7	402	2	7425	285	2	9216	347
						1959	3	9813	4.0	387	3	12157	481	3	12208	452
115709	4 1	2	14955	3.8	571	1957 1958	1	16670 13240	3.8 3.8	635 506	1	14870 15530	561 585	1	13832 14028	534 531
115772	2 1	1	13380	3.4	458	1959	1	13380	3.4	458	1	11490	437	1	11718	440
115856	9 6	6	12045	4.0	483	1959	6	12045	4.0	483	5	11496	443	6	11930	469
1163116	6 2	2	16365	3.8	616	1958 1959	1	16220 16510	3.9 3.7	626 605	1	15530 14630	590 578	1	14737 14606	558 555
116401	4 1	1	12870	4.2	542	1958	1	12870	4.2	542						
1164018	8 1	1	14310	3.5	505	1959	1	14310	3.5	505	1	14100	519	1	13821	508
116763	2 4	ţţ	12613	3.8	473	1959	4	12613	3.8	473	4	11893	475	4	13857	528
117042	5 1	1	9240	3.8	352	1959	1	9240	3.8	352	1	12490	445	1	11151	437
117048	0 2	3	12065	4.2	504	1956 1957	1 2	11980 10985	4.0 4.2	460 461	1 2	16270 14665	579 547	1 2	14519 14366	528 541
117091	0 6	7	9436	3.8	360	1958 1959	1 6	7100 9480	3.8 3.8	273 361	1	12480 11480	465 417	5	11517	427
117546	6 2	3	11783	4.0	470	1958 1959	1 2	13930 11385	4.7 3.8	655 436	1 2	12210 10895	459 404	1 2	12121 11091	456 418
117546	7 1	2	10495	3.6	375	1958 1959	1	11110 9880	3.6 3.6	399 351	1 1	11650 11480	439 401	1	11543 11271	436 403
117957	4 3	4	10472	3.9	413	1958 1959 1960	2 1 1	13085 11140 6830	4.0 3.9 3.9	515 436 270	2 1 1	11295 11450 11820	420 440 421	2 1 1	11838 11946 11761	453 447 425
117957	5 2	3	11610	3.8	440	1959 1960	2 1	11890 11600	3.8 3.9	451 453	2	11315 11510	428 439	2	11243 11641	430 445
117972	9 1	1	17110	3.5	606	1959	1	17110	3.5	606	1	12250	564	1	12982	477
118075	8 1	2	7280	3.6	264	1956 1957	1	7280 7280	3.8 3.4	279 248	1	5630 8410	241 318	1	7205 8328	284 316
118366	5 22	29	15234	3.7	558	1956 1957 1958 1959	3 5 11 10	16300 15714 15122 14951	3.7 3.8 3.7 3.7	605 583 552 545	3 5 11 10	14303 14722 14594 14298	541 554 558 552	3 5 10 9	12938 13832 14294 14081	499 534 542 538
118484	8 2	2	10370	4.3	453	1959	2	10370	4.3	453	2	11125	422	2	10241	401
119015	1 4	łą.	11053	3.7	405	1959	4	11053	3.7	405	4	10940	435	3	10700	404
119277	9 1	1	19180	3.4	647	1959	1	19180	3.4	647	1	14970	629	1	14366	633
119278	9 1	1	11300	4.5	509	1959	1	11300	4.5	509	1	15350	569	1	15947	602
119393	4 1	1	10980	3.7	407	1959	1	10980	3.7	407	1	9370	368	1	9123	372
119416	6 4	5	13309	4 - 4	576	1957 1958 1959	1 2 2	10550 13335 14110	4.0 4.3 4.5	423 564 628	l 2 2	12060 15400 13130	443 618 511	1 2 1	11064 14966 15271	398 595 609
120405	2 15	18	15352	3.5	541	1957	4	14075	3.4	471	14	14730	556	14	13832	534
						1958 1959 1960	3 9 2	17240 15516 17035	3.5 3.6 3.5	600 562 594	3 9 2	14287 14238 14880	529 546 567	2 8 2	14737 14058 14214	556 535 546
120679	7 7	13	14975	3.7	543	1957 1958 1959	4 6 3	13675 15115 16713	3.6 3.6 3.6	485 541 609	4 6 3	14800 15572 14727	559 588 565	4 6 3	13832 14506 14283	534 546 546
121132	5 14	18	14949	3.4	515	1957 1958 1959 1960	2 6 9 1	16810 15825 14320 22380	3.5 3.4 3.4 3.5	589 544 492 776	2 5 9	14860 15428 14698 16240	550 582 568 628	2 5 9 1	13832 14458 14350 14214	534 545 547 546
121138	4 1	1	14410	3.3	482	1959	1	14410	3.3	482	1	12490	455	1	13287	491
121239	5 1	1	7520	3.7	277	1960	1	7520	3.7	277	1	13180	491	1	13156	488
121568	7 1	1	8900	3.7	328	1959	1	8900	3.7	328	1	11620	448	1	11728	445
121690	9 2	2	7120	4.2	298	1959	1	7470	4.4	328	1	6690	325	1	8033	366
121695	7 5	5	13770	4.0	546	1960 1959	1	6770 14725	3.9 4.0	267 576	1	60 10	230 494	1	11892 13462	515
122274		1	19630		791	1960	i 1	9950	4.3	426 791	1	14610	577	ĭ	12895	492 555
				7.0		1737	•	1,030	7.0	. , ,		14010	311	'	14000	,,,

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

	DAUGHTER	AVERAGE	8Y SIF	RE		R	ECORO AVE	RAGE 8	BY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECDRDS NO.		TEST PCT.	FAT L8.	305-DAY RECDRUS NO.		. AV. FAT L8.	YEARLY HI RECORDS NO.	ERD AVE MILK L8.	FAT
							HOLS1	TEIN								
1224123	3 1	2	11335	4.6	514	1958 1959	1	10840 11830	4.5 4.6	486 542	1	12890 13170	497 497	1	11619 13658	451 525
1224313	3	4	12082	3.6	439	1958 1959 1960	1 2 1	9500 13715 10660	3.6 3.7 3.6	340 500 388	1 2 1	12290 13790 12430	451 512 468	2	12770 12927	496 493
1224521	7	7	10951	3.7	409	1959 1960	5 2	11038 10735	3.5 4.2	394 448	5 2	11932 10350	429 400	5 2	11702 12950	426 496
1239208	3 2	2	8635	4.0	357	1959 1960	1	11560 5710	4.4 3.6	507 207	1	10950 13160	418 525	1	12622	470
1239886	2	3	18233	3.7	669	1958 1959	1 2	17430 18295	3.9 3.7	674 663	1 2	15530 14785	589 573	1 2	14737 14279	557 547
1240125	5 1	1	17330	3.8	666	1958	1	17330	3.8	666	1	15530	589	1	14737	555
1242163	1	1	16340	3.6	588	1959	1	16340	3.6	588	1	14170	558	1	13974	534
1242164	1	2	14900	3.7	547	1958 1960	1	15430 14370	3.8 3.6	580 513	1	15540 14980	590 569	1 1	14737 14214	557 546
1246450) 1	1	11310	4.2	475	1959	1	11310	4.2	475	1	12060	455	1	13145	500
1249318	3 1	1	18500	3.4	635	1959	1	18500	3.4	635	1	13190	520			
1250260	71	72	11833	3.8	446	1959 1960	45 27	12110 11365	3.8 3.8	457 427	43 21	12201 12354	462 469	42 20	12954 13353	487 514
1255055	56	58	12743	3.8	484	1959 1960	53 5	12871 11996	3.8 4.0	485 484	51 5	12719 10664	480 379	47 5	13590 14678	517 550
1258022	21	21	13993	3.6	495	1959 1960	17 4	14129 13418	3.6 3.4	506 452	17 3	13424 13460	503 495	17 4	14856 13854	556 510
1264447	1	1	10270	3.5	356	1959	1	10270	3.5	356	1	11640	443	1	11739	445
1269686	2	2	12855	3.8	477	1960	2	12855	3.8	477	2	13385	538	2	14187	574
1280615	i 1	1	15080	4.0	597	1959	1	15080	4.0	597	1	15010	563	1	15238	570

MASSACHU5ETT5

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPEO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

SIKE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRE5H YEAR	RECUROS NO.		TEST PCT.	FAT L8.	305-DAY C RECORDS NO.		FAT	YEARLY HI RECOROS NO.	MILK	
							JER	SEY								
37 78 72	2 5	24	9392	5.3	496	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 2 1 2 2 4 3 1 1	7170 9405 9215 9290 11525 9960 9383 10243 12530 12070 9953 11270	5.5 5.6 5.3 5.3 5.8 5.4 5.4 5.0 4.6 5.0	397 532 488 494 608 476 502 528 621 557 497 575	1	8720 9140 11120 9820	464 468 598 493	I I I	8905 9112 11532 11903	
385252	2 1	1	8430	4.8	407	1953	1	8430	4.8	407	1	6880	374	1	6693	343
388705	5 13	43	7842	5.1	398	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	11 6 4 3 2 3 4 2 1	6879 7218 8093 8063 8660 7625 9310 9648 10930 9230 12620	5.1 5.2 5.1 5.1 5.0 4.9 5.0 4.9 4.7 5.0	350 377 413 413 438 374 469 469 516 464 607	2 2 2 2 3 4 2	9100 7940 7465 7800 7753 7960 8195 8480 10170	454 445 404 424 429 417 434 456 537	3 4 2 1 1	8175 8622 9058 8600 9559	439 464 469 457 518
394915	5 42	113	8136	5.1	411	1950 1951 1952 1953 1954 1955 1956 1957	8 20 23 23 18 14 3 2	9085 8076 8149 8012 8273 8816 10030 11285 11490	5.1 5.2 5.1 5.2 4.9 4.7 4.3	459 405 418 406 420 427 460 476 520	1 3 5 7 2 2	8490 8297 7840 8509 7570 8050	462 465 430 434 400 426	6 2 2	8065 7892 8878	434 414 462
395583	3 6	22	7593	5.2	394	1953 1954 1955 1956 1957 1958 1959 1960	5 4 3 2 3 2 2 2	7172 8633 7370 7440 7927 7940 7560 6920	5.4 5.3 5.2 5.3 4.7 5.1 4.9 5.0	386 453 381 391 371 410 369 343	2 2 1 2 1 2 1	7625 7935 7870 7700 7650 7705 8330 9860	407 400 420 397 397 407 419 477	1 2 1 2 1 1 1	8426 8279 8382 7717 6453 8295 8731 9102	455 407 446 398 329 440 440 451
399903	3 23	76	7296	5.3	385	1949 1950 1951 1952 1953 1954 1955 1956 1957	2 8 17 17 11 9 6 2 1	4785 7576 7606 7688 7144 7524 6973 8150 8310	5.4 5.4 5.4 5.4 5.2 5.1 4.8 5.0	259 407 414 413 382 394 354 415 396 505	3 6 5 5 4 1 1	7820 8683 7918 7758 7488 8610 7750	436 472 426 412 398 480 421	14 3	8123 7888 9352	423
401923	3 3	9	7480	5.6	421	1959 1947 1949 1950 1951 1952 1953	1 1 2 2 2 2	7390 8170 6840 7060 8575 7080	5.1 5.5 5.5 5.7 5.8 5.7 5.8	408 448 385 409 488 414	1	9420 8170	513	1	9320	511
403320) 1	Ц	5620	5.8	328	1952 1953 1955 1956	1 1 1 1		5.6 6.2 5.0 6.3	297 453 212 350						
40463	1 5	11	7623	4.9	366	1949 1950 1951 1952 1953 1955	1 1 1 2 1 1	8810 6463 7920 6060 7455 7330 9400	5.6 5.5 5.6	428 359 437 340 336 298 376	1 1	4500 5850 5450	274	1	6693	343
405148	3 2	6	7848	5.9	460	1947 1948 1949 1950 1951 1953	1 1 1 1	677 0 7010 7600 9720 10350 9950		395 405 444 595 602 581	1 1 1	8880 10170 9060 8420	489 615 534 511	1	7728	460.
40797	1 4	14	6973	5.4	376	1951 1952 1953	1 1 2	6310 5580 8000	4.8 6.0 5.4	302 337 432	1	9200	515	1	8251	453
41157	1	6	8122	6.0	489	1951 1952	1	9080 9010	6.0 6.2	548 557						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	BY YEAR DAUGHTER				RDS FR		STATE UNI		ov cra	E 4V	FRESHENING	VEAD				
	DAUGHTER	AVERAGE	01 31	N.L		r	ECORD AVI	LKAGE	31 31K	10 31			. AV.	YEARLY H	ERD AVE	RAGE
STRE- NO.	DAUGHTERS NO.	RECORDS NO.		FEST PCT.		FRESH YEAR	RECORUS NO.	L8.	TEST PCT.	FAT L8.	RECORDS NO.			RECORDS NO.		
						1953 1955 1956	JER: 1 1 2	10160 8880 5800	6.1 6.1 5.8	616 541 337						
կ 1 կ է կ կ	12	4 4	6737	5.2	351	1952 1953 1954 1955 1956 1957 1958 1959	5 9 4 1 3 3 2 1	6544 6734 7718 7319 7670 7217 7500 7130	5.2 5.4 5.5 5.2 5.2 5.3 5.2 5.6	338 360 422 319 397 384 393 397	3 6 3 3 1 3 1	8530 7655 ///0 7690 9270 7987 8110 7230	437 393 416 408 485 430 451 400	6 3 3 1 3 1	7928 8201 7971 7467 7790 7445 7118	417 433 426 393 419 402 403
419499	1	1	4700	5.2	243	1949	1	4700	5.2	243						
422988	3 2	14	7464	5.7	421	1953 1954 1955	1 2 1	6750 7965 5160	6.0 5.6 6.0	408 443 312	1	6660 6990 5260	348 358 268	1	6595	353
42312:	3 1	4 '	5 740	5.0	289	1951 1952 1953 1954	1 1 1	6110 5470 5900 5480	5.2 5.0 4.9 5.0	319 272 288 276						
431198	3 1	Ħ	6803	5.6	384	1953 1955 1956 1957	1 1 1	8430 6640 6360 5780	5.8 5.6 5.6 5.4	490 373 358 315						
433645	5 25	85	8589	4.9	¥19	1949 1950 1951 1952 1953 1954 1955	1 16 19 17 12 12 6 2	8390 8541 8856 8506 8943 9092 10255 10975	5.2 5.0 5.0 5.0 4.9 4.9 4.6 5.0	439 429 440 423 440 449 472 545	1 8 8 7 6 3	8610 8980 8445 7508 7874 8733 8640 9100	452 484 450 401 420 450 435 474	7 7 3 1	7758 8271 8317 8622	40/ 441 432 438
435759) 1	1	9140	5.8	530	1953	1	9140	5.8	530						
436872	2 11	20	7682	5.2	394	1954 1955 1956 1957 1958 1959	3 2 4 2 6 3	6670 6830 7005 6805 8562 7387	5.5 5.5 5.1 5.6 5.2 5.2	363 372 350 380 440 378	1 1 3 2	7370 7270 8760 9140 8720	420 399 453 497 468	1 3 2 1	7804 8440 7690 10061 9123	414 450 409 534 431
439356	5 7	22	8204	5.4	442	1952 1953 1954 1955 1956 1957	5 3 4 4 2 1	8596 9507 6753 7820 7910 9480 9560	5.2 5.3 5.7 5.7 5.7 5.2 5.4	446 509 390 439 453 496 521	1	7410 6850	356 314	1	7565	377
441107	1	3	5937	5.5	326	1952 1953 1954	1 1 1	5660 6620 5530	5.4 5.6 5.4	309 370 299	1 1 1	7650 8110 7850	406 399 453	-	6780 7020	326 342
442491	2	2	8220	5.3	421	1954 1959) 1	7110 9330	6.0 4.5	426 416	1	9170	481	1	9058	470
445174	. 1	2	5600	5.6	314	1954 1955	1	5480 5720	5.4 5.8	296 332						
##93.40) 10	25	7131	5.5	389	1950 1951 1952 1953 1954 1955 1956	2 4 5 4 4 3 2 1	6270 7633 6878 7183 7443 7997 8345 8230	5.5 5.2 5.9 5.9 5.3 4.9 5.1	345 417 360 418 435 420 408 422	1 2 2 3 3 2 2	9030 8220 7680 7777 8717 8655 8000 8680	487 449 405 414 450 459 421	3 3 2 2 1	7921 7870 8513 8284 7837	421 426 456 440 412
448028	3 5	9	6491	5.7	360	1952 1953 1954 1955 1956	1 4 2 1 1	8440 6453 7025 8270 6390	5.6 5.8 5.2 5.1 5.3	470 364 360 424 339	2 	7270 7800 10150 8850	370 415 479 411	2 1	7560 8524 8971	399 456 434
44895	1 4	7	7610	5.3	398	1950 1951 1952 1953 1954	1 1 2 2 1	9410 7730 6205 6835 7230	4.1 6.2 5.3 5.0 5.4	439 475 323 343 387	}	9790 8760	487 452	1	8 65 5	461
449051	В 1	6	6203	5.6	347	1952 1953 1955 1956 1957	1 1 1 1	5280 6390 6480 6150 6270		312 363 354 340 340	1 1 1 1	8870 7730 7440 7570 7420	455 401 386 403 408	1 1 1	8055 7150 7467 7979	

TABLE 15.--GAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING DRGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

D	AUGHTER	AVERAGE	8Y SIF	RE		R	ECORD AVE	RAGE 8	BY SIR	E 8Y	FRESHENING	YEAR				
SIRE DA	UGHTERS NO.	RELDRDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-0AY (RECORDS NO.		FAT L8.	YEARLY HE RECOROS NO.		
						1958	JERS 1	6650	5.6	370	1	7300	409	1	7445	402
454144	60	146	7454	5.3	397	1952 1953 1954 1955 1956 1957 1958 1959	7 25 28 32 20 14 13 6	7226 7488 7187 7703 7300 7697 8080 7875 8310	5.6 5.5 5.4 5.5 5.3 5.3 5.3	404 404 391 420 385 404 429 413	10 9 8 7 6 6 3	7370 8103 8047 8426 7759 8393 8500 9070 9700	386 434 429 444 404 444 450 439 471	10 8 8 7 7 7 7 5	8208 8207 8565 7834 8267 8926 8679 9091	438 437 456 413 417 443 431 450
455325	5	14	8810	5.2	452	1951 1952	4 2	7913 6105	5.5 5.7	433 343	1	7250 8530	397 427			
						1953 1956 1957 1958 1959 1960	1 1 1 2 2 1	8400 8310 8920 10205 9740 8840	5.9 4.6 4.7 4.7 4.6	494 385 421 472 443 410	1 1 1	8560 8700 9390 7950 9150	437 450 503 443 454	1 1 2 1	8382 8502 9472 9391 8676	425 435 497 470 455
456604	2	3	8595	5.8	500	1949 1950 1951	1	8810 9130 8220	5.5 6.0 5.8	489 550 480						
457258	58	139	7879	5•2	401	1951 1952 1953 1954 1955 1956 1957 1958 1959	21 28 28 20 13 10 7 6 2	5568 7778 8030 7534 8006 8332 8823 10003 9468 6510	5.2 5.2 5.2 5.3 5.0 5.2 4.9 5.0	289 399 414 388 423 417 451 465 322	1 8 12 8 4 4 2 1 1	7920 8341 7608 8001 7750 7638 7735 8610 9400 9960	437 436 408 423 427 397 404 464 443	12 8 4 3 2 1 4 2	7888 7817 8644 8219 7363 8666 9494	412 411 465 440 377 456 436 502
458311	35	56	8141	5+2	423	1953 1954	8 14	8919 7826	5.4 5.1	478 402	5 3	7368 7960	388 397	6	7776 7932	406 408
						1955 1956 1957 1958 1959 1960	4 7 10 8 4	7800 7888 8739 10035 7710	5.2 5.3 5.3 5.2 5.2 5.6	334 407 418 452 520 435	3 2	9873 9395	341 519 498	5 3 2	9673 8713 8105	359 445 471 410
460497	1	1	9170	5.2	475	1959	1	9170	5.2	475	1	10210	506	1	9527	504
460769	34	67	7810	ν.9	382	1953 1954 1955 1956 1957 1958 1959 1960	7 13 16 11 10 6 3	6707 7928 7811 8711 8527 7673 8663 11910	4.6 4.9 4.7 5.0 5.2 4.8 4.6	310 389 383 417 426 394 418 544	3 8 8 4 3 1	7680 8288 7934 9073 8987 8530 9480	408 448 426 490 465 454 447	3 7 8 5 3 1	8186 8694 8435 8166 8011 8295 9483	433 471 453 425 421 440 464
463576	1	1	7120	6.3	448	1958	1	7120	6.3	448						
465493	3	5	8549	5.1	436	1955 1956 1957 1959	2 1 1 1	8915 8080 8140 7230	5.0 5.0	459 420 408 345	1 1 1 1	8750 10020 7430 6470	475 532 398 346	1	9679 7423	397
465966	14	43	8380	5.4	448	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 6 6 7 5 6 4 4 1 1	9235 7580 8408 9057 8248 8548 8393 8573 8890 9990	5.5 5.3 5.7 5.3 5.3 5.3 5.6 5.7	478 421 457 480 466 452 442 449 502 574 518	1 1 1 2 2 1 1	7190 9050 8360 7350 9400 7430 9560 9260 7950	384 439 410 398 458 382 493 486 434	1 1 2 1 1	7259 9374 8677 8502 9472 8557	372 47/ 430 435 497 448
465967	2	2	7175	5.0	354	1953	2	7175	5.0	354						
465969	10	32	7804	5.2	408	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 7 6 4 3 1 2 4 2	7910 6765 8293 8370 8880 9623 11030 9955 8813 9285	4.8 5.3 5.2 5.0 5.2 5.0 4.8 5.2	455 336 437 434 447 502 550 480 450	4 5 3 2 1 1 1 2	7545 7226 7443 8435 8330 8550 8260 6520	392 367 390 449 438 453 416 348	5 3 2 1 1 1	7774 7648 8382 8349 7695 8698 9189	399 406 446 439 415 439 460
466948	8	28	8302	5.1	425	1950 1951 1952 1953 1954 1955	5 6 5 6 1 4	9244 7415 8378 8932 6300 8033 7710	4.9 5.2 4.1 5.1	457 400 413 471 258 412 429	1	8610 8870 8400	465 482 441	1	8426	455
467002	5	6	6007	5.1	301	1954 1955 1956	2 3 1	4565 5523 9340	5.0	259 278 429						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.	LB.	TEST PCT.		305-DAY RECORDS NO.	MILK		YEARLY HE RECORDS NO.		FAT
46701	0 4	6	8037	5.3	413	1953 1954 1955 1956 1959	JER. 1 1 2 1	3530	6.2 4.1 4.8 3.9 5.2	219 399 479 315 494						
46805	4 6	14	7347	5.6	413	1953 1954 1955 1956 1957	3 5 3 2 1	7010 8088 6700 6300 5140	5.5 5.5 5.5	386 444 374 370 281	1 3 1	8370 7687 7180 8800	446 401 483	1 2 1	8426 8524 8382 8349	456 446
47395	5 1	1	5040	5.2	263	1957	1	5040	5.2	263						
47395	6 4	6	8743	4.9	431	1958 1959	2 4	11910 7495	5.4 4.6	643 344	1	8410	416	2	9107	396
47464.	3 1	3	7697	5.3	415	1951 1955 1956	1 1 1	9500 5110 8480	5.5 4.9 5.6	520 248 476	1 1 1	9830 12160 9450	495 578 421	1	9363 9221	
4755-i	7 1	1	7350	5.0	364	1957	1	7350	5.0	364						
47570	0 3	7	6705	5.8	369	1954 1955 1956 1957	2 2 2 1	5825 8205 9205 5890	6.0 5.2 5.1 5.6	327 421 470 330	1 1 1	6860 6180 5900	356 335 306	1 1 1	7140 6682 6856	403 359 36 7
4 7 852	1 1	1	7080	5.0	354	1959	1	7080	5.0	354				1	9036	426
47852	3 1	1	6070	5.1	311	1960	1	6070	5.1	311	1	5460	272	1	5995	294
48028	7 2	3	8 7 03	5.3	450	1958 1959 1960	1 1 1	6820 10750 10420		412 475 500						
48064	2 2	ų	6869	4.9	339	1952 1953 1954 1959	1 1 1	8070 4670 8700 6590	4.8 3.7 4.5 5.4	390 181 393 357	1	5360	262	1	5995	294
48471	3 2	10	9372	6.0	558	1953 1954 1955 1956 1957	1 2 2 1 2	9420 10330 8515 11830 8650	5.9 6.0 6.2 5.8	590 610 512 732 503	1 1	12470 11890 10190	615 600 565 557	1 1 1	10987 11369 10769	582 603 574
48517	0 1	Ł,	7670	4.8	368	1958 1952 1953 1956 1957	2 1 1 1 1	8740 7130 7646 6820 9090	4.9	505 346 368 314 443	1 1 1 1	9820 8620 8070 8720 9540	501 430 409 445 501	1 1 1	8186 8382 8502	425 425 435
46632	3 29	33	7337	5.1	376	1957 1958 1959 1960	1 9 19 4	8870 6169 7618 7358		462 321 394 352	1 5 7 1	12620 9098 8911 7720	541 489 446 384	7 15 4	89 18 9634 905 5	472 461 416
49086	0 1	łą.	7275	5.8	426	1953 1955 1956 1957	1 1 1	8270 7850 7690 5290	5.9	493 472 457 280						
49173	1 7	17	6657	5.3	355	1953 1954 1955 1956	6 6 3 2	6225 7015 6977 6555	5.4 5.3 5.4 4.9	342 371 385 336	1 2	8400 6465	407 328	1 2	/957 6153	
49216	0 3	6	7129	5.0	344	1958 1959 1960	3 2 1		5.5 4.7 4.6	328 369 351	1	7190	390	1 1	7521 12328	
49545	3 2	5	8848	5.6	494	1955 1958 1959	1 3 1	8437	6.0 5.1 5.3	547 432 468	1 1 1	10510 79∠0 9410	518 395 445	1 3 1	8535 3695 8393	455 450 437
49594	3 32	49	8418	5•4	452	1956 1957 1958 1959 1960	1 3 20 15 10	5780 7157 7923 8852 9518	5.1 5.5 5.4	291 364 435 475 534	1 3 7 5 6	6410 8790 8427 8760 9260		1 2 9 8 8	6551 8393 8838 8670 8977	326 404 488 437 453
49682	9 35	50	77 12	5.3	410	1957 1958 1959 1960	1 14 34 1	11390 7584 7635 8970		566 410 405 494	1 6 18	10120 8765 8578	534 474 449	1 9 23	9559 9131 8910	518 488 462
49751	6 67	97	7867	5.1	399	1955 1956 1957	4 8 9	6876	5.0 5.1 5.0	319 347 408	4 2	7228 9810		1 4 3	7837 7519 9508	

TABLE 15---OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.	MILK	TEST PCT.	FAT L8.	FRESH YEAR	KEÇOROS NO.	MILK L8.	TEST PCT.	FAT L8.	305-0AY (RECORÚS NO.			YEARLY HE RECORDS NO.		
						1958 1959 1960	JER: 33 35 8	8360 8143 8713	5.0 5.2 5.1	415 416 436	12 19 6	8113 8155 9977	422 422 545	16 26 7	9076 8933 9410	46 l 44 9 472
49757	4 10	13	11902	5.3	634	1958 1959 1960	5 5 3	1325∠ 10464 13777	5.0 5.2 5.3	722 538 730	5 5 3	11296 10326 10283	626 547 561	5 5	11369 10859	5 52 5 83
49759	9 1	1	8930	5.1	456	1959	1	8930	5.1	456						
49853	1 1	3	6950	4.9	336	1958 1959	2 1	6920 7010	4.8 5.0	329 350	1	8380 8780	422 439	2	8535 8884	434
50505	7 2	3	7775	5.4	415	1958 1959 1960	1 1	7900 6740 9720	5.2 5.4 5.4	413 363 521	1	8240 8540 7 980	467 421 440	1	8676 8524	516 448
50669	7 2	4	8799	4.9	436	1958 1959	2 2	12310 8535	5.2 4.6	635 417	1	8270	419	1	9527	504
51700	2 2	2	6960	5.2	361	1958 1960	1	6240 7680	5.3 5.1	328 394		8370 88 7 0	474 442		8676 9069	516 471
52117	5 42	61	8408	5.5	463	1957 1958 1959 1960	6 23 25	8942 8002 8340 9050	5.2 5.6 5.6 5.6	463 446 461 522	2 8 13 2	8500 7938 7780 10105	467 417 416 506	3 11 18 6	9450 8792 8656 9084	465 448 438 480
52201	4 3	3	5093	5.7	287	1959 1960	2	5765 3750	5.5	312	2	7305 10220	403 473	2	8339	450
52299	5 I	1	8590	5.8	495	1960	· 1	8590	5.8	495		9030	494			
52 90 7		1	6680	5.2	350	1960	1	6680	5.2	350	1	8030	395	1	9058	445
53228	9 2	2	8185	6.1	493	1959 1960	1	8820 755 0	6.0 6.1	528 457	1	10170	539 4 71	1	8785	485
53411	9 1	1	6520	6.0	392	1958	1	6520	6.0	392	1	8230	462	1	8676	516
53436	6 2	ц	6463	5.8	370	1959 1960	2 2	6535 6390	5.7	312 367	2 2	8500 7125	429 369	2	8295 8873	431 435
53560	7 1	1	9200	5.8	536	1959	1	9200	5.8	536	1	8490	462	1	8622	473
54664	8 3	ц	8217	5.3	435	1958 1959 1960	2 1 1	8045 7930 9110	5.6 5.3 4.9	444 418 449	1 1	9380 7880 8490	497 444 469	1	9472 8622 8633	497 451 471
55019	6 I	1	7490	5.5	414	1959	1	7490	5.5	414	1	5340	293	1	7706	447
55072	3 1	1	6380	5.2	333	1960	1	6380	5.2	333	1	8720	478	1	8567	469
55297	6 1	2	7500	5.7	428	1958 1959	ŀ	7750 7250		458 397	1	7570 6600	425 369	1	7892 7576	450 422
55350	7 1	1	7890	6.1	480	1959	I.	7890	6.1	480	1	7240	390	1	o 339	450
55518	4 37	44	8068	5.2	415	1958 1959 1960	9 33 2	8216 8034 8995	5.2 5.2 5.1	428 413 453	2 0 2	8260 7810 8185	445 420 419	7 27 2	9211 9030 6088	459 439 440
55 7 2 6	7 3	7	9390	5.4	504	1958 1959	4 3	8543 9187	6.1	522 485	2	9030 8143	515 438	1 3	8676 8404	516 462
55726	8 8	14	8017	5.7	452	1958 1959 1960	/ 6 1	8621 7392 9390	5.6 5.8 5.6	482 423 525	5 6 1	8552 7537 8660	483 413 485	5 6 1	8798 8190 8840	486 443 479
55830	0 1	1	7760	5.3	410	1959	1	7760	5.3	410				1	8611	476
56130	4 1	2	7220	0.1	436	1959	2	7220	6.1	436	1	6380	342	1	6573	355
56148	7 1	1	6480	5.6	365	1960	1	6480	5.6	365	1	5760	257	1	8807	445
56946	6 1	1	11060	5.4	596	1960	1	11060	5.4	596	1	10730	615	1	10017	547
57278	9 1	1	5940	5.7	339	1960	1	5940	5.1	339	1	5140	246	1	5995	294

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER				NOS FR	KOM INT?			Ry clo	E DV	FRESHENING	AE V D				
	DAUGHTER	AVERAGE	01 31			^	ELUKU AV	ERAGE (31 3 IN	E 01			. AV.	YEARLY HE	RO AVE	RAGE
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.		RECORDS NO.		FAT		MILK	
							BROWN	221W2								
37565	1	2	10300	4.4	453	1949 1951	1	9450 11150	4 - 4	4 12 4 9 4						
38049	1	2	11785	4.6	541	1954 1956	1	12140 11430	4.8 4.4	584 498	}	11220 14230	466 616			
454 17	26	50	10058	4.2	415	1952 1953 1954 1955 1956 1957 1958 1959	2 1 5 9 10 14 5 3	7970 9920 9186 12144 9609 10140 13342 13370 7630	3.9 4.2 4.1 4.1	352 493 421 474 401 415 551 521 296	3 2 1 1	10770 12355 9930 11650 12720	427 498 449 495 559	3 1 1 2	10722 10159 11685 9805 9701	418 396 521 413 384
51890	1	2	7720	4.7	359	1956 1957	1	5640 9800	4.6	259 459						
59466	1	1	10730	4.1	444	1953	1	10730	4 - 1	444						
59811	1	1	9530	4.0	382	1953	1	9530	4.0	382						
61560	1	2	14840	4.5	675	1958	2	14840	4.5	675				2	12971	564
62573	i ii	12	11372	4.3	490	1952 1953 1954 1955 1956 1957 1958	1 1 2 1 2 2 2	11280 11230 10400 11585 9840 13220 13155	4.5 4.2 4.2 4.6 4.7 4.4	506 470 432 524 462 584 538				1	12873	560
						1959	2	10325	4.6	471	1	14190	617	2	10786	486
65421	37	84	11276	4.0	448	1952 1953 1954 1955 1956 1957 1958 1959 1960	1 9 12 11 8 6 19 12 6	16380 11258 12444 11733 10058 13640 11907 11813 6773		716 455 506 456 390 543 466 477 262	1 5 3 6 7 4 9 8 5	12580 9836 11420 9437 10587 11675 10329 10450 6718	594 414 472 376 418 477 438 434 284	3 2 5 7 3 4 11	8349 8039 9819 10413 12077 10014 8652 8395	345 326 397 424 496 408 366 357
70747	62	119	11116	4.1	460	1953 1954 1955 1956 1957 1958 1959	1 7 12 13 17 39 24	14960 11530 11553 10367 11139 12035 11546 7548	4.6 4.2 4.2 4.1 4.2 4.1 4.2 3.9	691 485 483 428 471 494 479 292	1 2 4 4 2 6 12 5	13420 13220 11478 10965 9885 9358 9808 6407	565 564 503 469 429 393 409 271	1 2 4 3 3 17 14 5	13429 13636 11505 10359 14286 10764 9943 8637	562 592 484 430 532 435 406 366
72115	7	13	10633	4.0	419	1953 1954 1955 1956	2 2 5 4	15550 15650 10892 9778	3.7 3.6 3.9 4.2	568 559 416 403	2 2 5 3	13495 13225 12580 12007	571 572 555 542	2 2 5 3	13429 13636 12034 12481	562 592 509 544
72394	1	1	5440	4.3	235	1960	1	5490	4.5	235						
72949	1	2	7610	4.7	365	1958 1960	1	9700 5520	4.9 4.5	479 251	1	11710 5180	511 213	1	10126 8448	439 363
74062	1	1	12780	4.3	544	1959	1	12780	4.3	544	1	8400	348	1	8982	366
74937	3	7	95/7	łş ₀ lş	428	1952 1953 1954 1955 1956 1957	1 2 1 1 1	10560 9705 8140 8920 8670 10310	4.2 5.0 4.9	530 412 408 437 397 522						
76059	6	11	12046	4.5	542	1956 1957 1958 1959 1960	3 1 3 3 1	9310 8990 11657 15153 15510	4.7	371 387 495 719 708	1 1 2 1	10170 12370 11225 11410 7030	523 483 483	1 2 1	9734 10018 8284	444
78688	11	38	12285	4.3	526	1950 1951 1952 1953 1954 1955 1956 1957 1958	1 5 7 8 6 5 4	15530 12506 11470 13756 13580 12152 10078 11550 7160	4.4 4.2 4.2 4.4 4.2 3.9	665 548 500 581 567 529 433 446 289	3 2 1 1 3 1	12787 11095 11730 11140 8777 11010 9660	509 473 489 473 360 439 389	1 2 1	9919 10301 11957 9766	410 427 485 391
82405	3	5	11768	4.2	499	1958 1959 1960	3 1 1	13003 9920 10840						2	12873	560

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY SREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE
RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAUGHTER	AVERAGE	8Y 51	RE		R	ECORO AV	LRAGE I	BY SIK	E 8Y	FRESHENING	YEAR				
SIME NU.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT	305-DAY RECORDS	MILK		YEARLY HE RLCOROS NO.		FAT
							8KOWN	SWISS								
82516	1	2	12000	4.8	572	1956 1957	1 1	10610 13390	4.8 4.8	505 638						
82585	1	2	9270	4.2	382	1956 1958	1 1	10420 8120	4.1 4.2	424 340						
84255	1	2	10020	4.4	442	1954 1955	1 1	11900 8140	4.2	540 344				~		
85637	1	3	13340	4.3	567	1955 1957 1958	! ! 1	17880 12680 9460	4.1 4.2 4.5	740 535 426	1 1 1	17020 17210 10650	669 679 444	1	13069	554
86137	1	3	13260	4.7	621	1957 1959 1960	1 1 1	9990 14050 15740	4.9 4.5 4.7	487 629 747	1 1 1	14950 13340 10220	628 540 419	1 1 1	11685 11696 10093	521 500 428
86139	ŢŤ	9	10380	3.9	407	1954 1955 1958 1959	2 1 4 2	11720 10500 9735 9290	3.9 3.7 4.0 4.0	452 384 386 375	2 1 2 1	11565 11020 11365 9990	469 464 473 408	i 1	11074 11064	455 455
87015	1	2	9875	4.2	409	1953 1955	1	10110 9640	4 • 2 4 • 1	42 7 391	1	12430 11040	49 1 449	1	11064 11064	452 455
87630	2	3	16215	4.5	729	1958 1959	2	18100 14330	4.3	783 675	1	12980	556	2	12971 10083	564 440
87677	1	2	7190	4.8	344	1958	2	7190	4.6	544	1	12190	550	1	12077	544
89612	43	75	9981	4.3	430	1953 1954 1955 1956 1957 1958 1959 1960	5 6 8 9 8 22 15 2	7688 9235 9688 10642 10189 11613 9607 7700	4.3 4.7 4.4 4.2 4.3 4.3 4.4	332 425 423 441 437 492 414 335	1 3 3 3 1 8 9	10030 11283 11567 11117 11040 10766 9639 6860	451 459 464 415 423 448 401 279	1 3 3 3 5 11	11292 10431 10464 10722 11462 9557 7630	510 438 418 448 483 415 332
896 14	45	70	10492	4.4	460	1954 1955 1956 1957 1958 1959	6 5 6 23 20 5	11798 10576 8276 8713 10674 9057 10270	4.0	543 440 334 364 467 409 426	3 4 4 17 10 5	10683 9093 10325 11160 10952 10259 5004	438 371 423 459 472 429 208	1 4 8 14 5	8687 9987 10630 12459 10843 9413 8583	355 398 442 496 456 405 370
90000	6	26	10213	4.3	428	1952 1953 1954 1955 1956 1957 1958 1959 1960	2 3 2 3 2 1 6 4	7530 9037 9950 11960 11955 13820 10642 9558 10057	4.3 4.2 4.1 4.4 3.9 4.1	365 388 420 497 522 536 433 398 410	1 2 1 2 2 2	12420 11120 10730 10550 9700 9230 9700 7100	519 482 451 443 396 366 413 299	2 2 3 4 3	11042 11074 8981 8778 8342	456 463 365 375 351
90848	1	1	6 380	3.9	250	1959	1	6380	3.9	250	1	7100	260	1	10355	427
91234	4	6	10341	4.2	423	1958 1959	2	11700 10508		499 42 7	1 4	12010 8475	5 17 35 6	2	13004	557 380
91609	11	29	13994	4.3	598	1952 1953 1954 1955 1956	4 0 6 9 -	13493 14687 14675 13880 13223	4.1 4.4 4.4	593 590 641 608 597						
93771	1	1	13060	4.1	533	1960	1	13060	4 - 1	533						
94392	2	14	6957	4.3	290	1958 1959	2		4.4 4.5	260 330	1 1		354 352	1	8960	363
94606	2	3	10188	4.4	450	1957 1958 1959	1 1 1	12790 9560 9200	4.0	658 381 380	1 1 1	12320 10830 8540	512 435 354	1 1 1	9679 10344 8840	426
94665	1	ı	16190	4.2	67a	1959	1	16190	4.2	678						
94773	2	3	8325	4.3	346	1958 1959	2	3840 12810		168 523	1	8200	368			
99438	1	1	12420	4.7	579	1957	1	12420	4.1	579	1	11860	517			
100513	2	2	8480	4.3	362	1959 1960	1		4.2 4.4	391 333	1	7050	300		7303 9189	317 3/1

TABLE 15.--CAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

RECORD AVERAGE BY SIRE BY FRESHENING YEAR OAUGHTER AVERAGE BY SIRE 305-DAY CONTEMP. AV. YEARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LB. LB. NO. LB. LB. SIRE DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. BROWN SWISS 13581 568 9439 393 4 11417 4.2 478 4.1 4.3 4.0 4.4 9090 384 9030 4.7 424 4.7 15090 600 13069 554 4.6 4.5 1959 4.5 516 11598 478 8764 359 14 145/6 4.1 600 4.1 570 34 I 3 10987 4.6 508 10987 4.6 9160 387 10797 433 9350 395 9120 4.4 399 9120 4.4 ı 8290 4.3 355 4.3 8570 355 8057 4.1 346 10720 4.4 471 2730 3.5 96 9984 393

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE. N ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY B.ELU,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECUROS NO.		TcST PC1.		FRESH YEAR	RECORDS NO.	LB.	TEST PCT.		SOS-DAY C RECORDS NO.	MILK		YEARLY HE RECORDS NO.	FAI
							Ha 31101	· IIIOK.4							
6240	9 1	1	6670	4.1	274	1959	1	6670	4.1	274	1	8630	327		
248694	7 3	3	7807	3.7	291	1955 1957	2	5895 11630	3.7 3.7		2 1	5850 8560			

RHODE ISLANO

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATION.--GROUPLD BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

3.9 4.0 3.9

4.1

10300

413

RHODE 1 SLANO 138

TABLE 15.--DAUGHTER-AVENAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

RECORD AVERAGE BY SIKE BY FRESHENING YEAR DAUGHTER AVERAGE BY SIRE 305-DAY CONTEMP. AV. YEARLY HERD AVERAGE RECDROS MILK FAT RECORDS MILK FAT NO. LB. LB. NO. LB. LB. SIRE OAUGHTERS RECORDS MILK TEST FAT NO. ND. ND. LB. PCT. LB. FRESH RECORDS MILK TEST FAT ND. YEAR NO. LB. PCT. LB. AYRSHIRE 3.9 ևևև 1050B 4.2 195B 3.8 4.2 348 4.1 3.7 4.1 9100 3B0 ı ı 3.5 ı 3.5 4.2 4.0 4.1 1959 4.1 1, 10 10169 4.2 10294 4.2 423 ì 4.4 LAQ LAA 1957 4.2 10330 11510 3.7 1062B 3.9 3.9 3B8 B620 4.4 ı B620 4.4 4.0 4.0 1954 4.1 3.9 B520 4.0 3.8 195B 4.3 9591 4.3 411 4.1 1050B 1959 9903 10737 10941 4.2 4.0 44 | ı 4.3 4.3 4.1 195B 4.2

4.1

11027 439

11053 468

RHODE ISLAND 139

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	D'AUGHTERS NU.	.RECORDS		TLST PCT.	FAT L8.	FRESH YEAR	RECURUS NU.		TEST PCT.	FAT	305-DAY C RECURUS NO.		FAI	YEARLY HI RECORDS NO.	MILK	
							GULRI	NSEY								
21994	16 2	4	7232	4.4	320	1952 1953 1954	1 2 1	5170 6870 6680	4.3 4.4 4.2	221 305 279						
24607	'2 I	3	6150	4.7	288	1952 1953 1954	1 1 1	6500 5670 6280	4.7 4.7 4.6	305 269 289	1 1 1	6690 7000 7850	321 337 375	1	6802 7325	322 348
Z492Z	:7 1	7	8143	4.9	391	1952 1953 1954 1955 1956 1957	1 1 1 1 1	6160 4080 8460 7920 10010 10540 9830	5.0 4.6 6.2 5.4 4.6 4.4 4.1	308 186 521 425 464 466 407	1 1 1 1 1 1	6710 7090 7960 7810 8510 8830 6210	321 342 369 349 395 427 284	1 1 1 1 1	6802 7325 7794 7761 8044 6965	322 348 360 354 384 320
25893	55 2	2	8765	5.0	431	1951 1952	1 1	10220 7310	4.5 5.5	459 402						
26315	51 1	6	6993	4.8	331	1952 1953 1954 1955 1956 1957	 	7020 4800 7520 7310 7530 7780	5.0 5.4 4.5 4.4 4.5	352 257 336 319 338 381	i i i i	6650 6430 8000 7840 9370 9170	319 312 378 354 428 442	1 1 1 1	6802 7325 7794 7761 8044	322 348 360 354 384
28095	o4 I	3	9103	4.5	414	1954 1955 1956	1 1 1	11010 9820 6480	4.6 4.6 4.4	504 454 283	1	9560 10690	468 427	}	9330 89 0 5	431 397
28731	11 2	11	9758	4.6	Ա Ա Հ	1951 1952 1953 1954 1956 1957 1958	1 1 2 1 1 2 1 2	8220 8420 9435 10120 10180 11415 10800 9130	4.6 4.9 5.1 4.5 4.1 4.7	376 387 454 513 461 470 508 403	1 1 2 1 1 2 1 2	6550 7140 7625 7510 8510 8600 7550 5870	304 333 349 350 395 400 360 270	2 1 1 2 1 2	6802 7325 7761 8044 8001 6965	322 348 354 384 378 320
30296	5 2	14	8313	4.5	363	1953 1955	2 2	7840 8785	4.6 4.3	354 371	2 2	7810 8230	361 372	2 2	6802 7794	322 360
31699	P6 1	2	9165	5.0	453	1955 1956	1	8930 9400	5.1 4.8	456 450	1	9580	427	1	8905	397
33605	8 8	14	7167	4.6	326	1952 1953 1954 1955 1957 1958	2 2 4 2 3	6295 7350 6958 6320 8850 6810	4.4 4.7 4.6 5.0 4.5 5.1	280 347 320 314 394 350] 4 2 3 1	6890 8775 8900 8263 8790	309 386 437 406 311	1 4 1 3	6693 9153 7750 7913	316 409 354 390
34606	55 1	1	11580	4.2	481	1959	1	11580	4.2	481	1	9890	450			
36 149	2 2	5	8517	4.5	382	1953 1954 1955 1956	1 2 1 1	9620 9420 8450 8390	4.1 4.6 4.6 4.5	398 434 387 381	1 2 1 1	10690 10360 10790 10300	506 493 546 486	1 1 1	9984 10202 8 7 42	472 484 412
36246	59 1	3	11990	4.2	509	1952 1953 1957	 	12740 11810 11420	4.1 4.3 4.3	525 512 490	1	11050	538			
36545	57 2	6	9949	4.7	459	1953	2	10615	4.8	511	2	10560	493	2	9984	472
						1954 1955 1956 1958	1 1 1	6340 12760 11650 12920	4.5 4.5 4.9 4.2	284 573 569 539		8640 9650 10350	369 463 463	1 1 1	10202 8742 9941	464 412 463
36578	3 3	5	6818	5+1	349	1952 1953 1954 1956	1 2 1 1	5920 7655 7460 6170	4.9 5.2 5.0 4.7	290 398 370 290						
37794	45 8	20	8769	4.9	432	1951 1952 1953 1954 1955 1956 1957 1958	2 3 3 1 3 1 1	9010 8637 8767 9098 10630 9303 7370 9840 13080	4.8 5.3 5.1 4.8 4.5 5.0 5.6 5.3	435 461 443 435 482 470 410 518 707	1 1 1 2 1 1	8680 10960 9330 7690 12640 9810 10090 13660	459 481 505 378 538 499 455 567	2 1 1 1	9243 10170 10235 9788 13047	433 444 514 497 523
38143	30 3	ý	8050	5.4	435	1951 1952 1953 1954 1955 1956	3 1 2 1 1	7560 8450 8880 6940 7250 8990	5.5 5.6 5.4 5.0 5.3 4.7	417 473 480 350 385 424	1 1 1 1	9030 9480 11970 13210 15820	465 514 494 468 615	1	9374 10170	422 444
40123	32 2	2	10005	4.5	450	1959	2	10005		450	2	10390	468	1	10519	451

RHODE ISLAND 140

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	BY 516	Łξ		RECORD AVERAGE BY SIRE BY FRESHENING YEAR												
SIRE	DAUGHTERS	RECORDS	MILK	TLST	FAT	FRESH	RECURDS	M11 K	TEST	7.43	3D5-DAY RECORDS		. AV.	YEARLY HE	ND AVE			
NO.	NO.	NO.		PCT.	LB.	YEAR	110.			L8.	NO.	Lö.	LB.	ND.		LB.		
							LUCRI	NSEY										
403768	3 13	27	7763	5.0	385	1952	1	8390	6.0	501								
.02000				3.0	303	1953	3	6403	5.4	345	3	9187	422	2	b611	413		
						1954	6	8708	4.9	427	4	8865	407	4	9268	445		
						1955	5	7192	5.0	357	5	9196	417	4	8750	393		
						1956	4	5978	4.8	285	3	8183	388	2	7194	315		
						1957	3	6227	4.9	306	2	8610	416	2	7488	378		
						1958	5	8512	4.9	415	5	7383	359	3	7855	371		
433179	7	18	9115	4.9	451	1952	1	9590	5.1	494								
						1953	1	9450	4.6	439	1	10540	467					
						1954	4	9030	5.0	448	4	10835	479	3	9784	437		
						1955	4	9285	5.0	460	4	9140	440	3	9686	450		
						1956	3	9440	4.9	462	3	9087	428	2	9985	459		
						1957	4	9183	5.0	454	3	10443	463	3	8843	409		
						1959	1	6450	4.8	308	1	6510	317	1	7848	387		
438526	9	16	8986	4.9	439	1954	5	9058	4.7	430	4	10278	449	3	9330	431		
						1955	2	10555	4.7	486								
						1956	4	8735	5.0	434								
						1957 1958	2	7110	5.0	350								
						1958	1	8430	5.1	430 487	2	0766	1. 3.4		0301	1. 1.1		
						14.24	2	9305	5.2	407	2	8355	415	1	9385	411		
440580) 2	6	8675	5.0	432	1954	1	9980	4.6	463	1	10680	457	1	9330	431		
						1955	2	7805	5.0	400	2	11165	495	2	9728	429		
						1956	1	8670	5 . c	499								
						1957	1	10490	5.1	538	1	12920	525	1	11510	495		
						1958	1	8840	4.9	433	1	6760	228					
490695	1	1	12360	4.7	584	1959	1	12360	4.7	584	1	11740	531	1	11936	531		

RHOOE ISLANG

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

STRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-DAY RECURDS NO.		FAT	YEARLY HI RECOROS NO.		FAT
							HOLS	TEIN								
658978	3 1	4	12140	3.9	474	1947 1948 1950	2 1 1	11660 11770 13470	3.9	481 454 481						
73051	6 5	12	13251	3.6	480	1953 1954 1955 1956 1957 1958 1959	2 3 3 1 1 1	10935 10813 12893 13250 14790 16280 16000		395 391 473 467 561 590 574	1 2 1 1 1	8990 10350 10500 9450 14330 14000 17570	311 378 386 349 553 513 620		11194 11156 12034 12655 11946 14846 16176	400 386 423 441 420 547 578
73791	5 1	2	10090	3.1	372	1952 1953) 1	9620 10560	3.6 3.7	350 394						
74987	2 1	1	3₹50	3.2	128	1948	1	3950	3.2	128						
758840	5 2	l _k	12573	3.9	483	1950 1951 1952 1953	1 1 1	13950 16530 8560 11251	4.0 3.7 3.8 3.9	557 608 328 437	1	12360 12570	42 <i>1</i> 449	1	10922	390
76197	7 1	3	10670	3.7	390	1954 1955 1957	1	8530 11090 12390	3.4 3.8 3.8	292 419 477	1	11490 14040	412 517	1	10900 10944	377 398
19010	5 1	1	3860	3.7	142	1954	1	3860	3.7	142	1	11620	410	1	10900	379
79987	5 1	1	18820	3.7	692	1959	1	18820	3.7	692	1	15960	569	1	15816	5/6
80625	5 1	1	11560	4.0	463	1955	1	11560	4.0	463	ı	11000	445	1	11249	383
81514	3 3	5	8810	3.6	324	1955 1956 1957 1958 1960	1 1 1 1	10120 11450 12270 8850 6300	3.9 3.7 4.0 3.7 3.3	398 427 486 329 205	1 1 1 1	11910 13000 14650 10570 12050	431 511 563 401 454	1 1	12034 12655 11946	423 441 420
8 182 8	0 1	iş.	14613	3.5	514	1956 1957 1958 1960	1 1 1	13160 14400 15690 15200	3.3 3.4 3.6 3.7	440 494 561 560	1 1 1	14650 15340 15170 15880	515 578 612 570	1 1 1	13941 13429 15042 15674	504 483 566 578
820752	2 1	5	11184	3.4	380	1947 1948 1949 1955 1956	1 1 1 1	10270 10040 9480 12710 13420	3.6 3.4 3.4 3.4	370 341 327 432 432	1	12060 13160	387 465	1	13941	504
82291.	3 1	6	14278	3.3	469	1949 1950 1952 1953 1955	1 1 2 1	11760 16680 12845 17080 14460	3.5 3.3 3.4 3.0 3.2	412 558 432 515 464	2 1	11845 13150 9990	402 455 370	1	11194 12034	
83026	9 1	1	10520	3.3	348	1952	1	10520	3.3	348						
83273	5 I	2	12020	3.6	427	1952 1953	1	10300 13740	3.6 3.5	373 481	}	12240 12460	424 447	1	10922	390
83702	5 1	1	12050	4.6	554	1959	1	12050	4-6	554	1	11920	463	1	11401	440
844276	6 4	17	11846	3.7	437	1953 1954 1955 1956 1957 1958 1959	2 2 2 5 3 2 1	10780 12355 13220 11996 12460 11910 16400	3.8 3.6 3.6 3.7 3.9	398 467 475 434 460 459 607	1 2 2 5 3 2 1	9310 12115 11080 11766 13117 13065 15540	322 430 417 427 488 511 556	1 2 2 5 3 1	11194 11494 11598 12151 12150 14846 13941	400 417 422 443 442 547 530
86060	3 1	1	10/60	3.8	410	1954	1	10760	3.8	410	1	11600	440	1	10878	403
86591	2 1	2	11375	3.8	425	1954 1955	1	11080 11670		431 418	1	11300	415	1	10813	467
86741	2 1	3	16217	3.5	557	1954 1956 1957	1 1 1	11460 18420 18770		431 592 647	1 1 1	12950 15470 14710	454 513 579	1 1 1	13734 16590 17484	487 591 614
87244	5 1	2	17150	3.3	561	1953 1955	1	1/920 16380	3.5 3.1	621 500	1	12390 10350	539 430	1	9091 8927	482 444
88137	6 12	31	14056	3.9	539	1947 1948 1949 1950 1951 1952 1953	1 6 7 4 2 2	10780 12826 12783 14291 13330 18490 16905	3.9 4.0 3.7 3.9 3.1	424 507 508 531 523 681 595	1 2 2	14980 15465 13065	562 562 496	2	12971	h
						1954	2	16635		591	2	13575		2	12720	476
88198	4 1	1	8440	4.1	342	1954	1	8440	4.1	342	1	11100	417	1	10878	408

RHODE ISLAND 142

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
8Y YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

í	DAUGHTER	AVERAGE	BY 51	RL		R	ECORO AVI	RAGE E	SY SIR	E 8Y	FRESHENING	YÉAK				
SIRE DI	AUGHTERS Nu.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECURUS NO.			FAT LB.	305-DAY (RECORDS NO•			YEARLY HE RECORDS NO.		FAT
							HOLS	TcIN								
884838	2	3	16545	3.9	640	1951 1952 1953	1 1 1	15730 15370 19350	3.6 4.1 3.9	594 o24 746	1	11880 12430	406 455	1	10922	340
889181	6	9	12426	3.9	482	1955 1957 1958 1959	2 1 1 5	13005 14000 13090 13320	3.6 4.0 4.2 3.9	460 557 545 517	1 1 5	10855 12150 14550 12436	422 468 555 478	2 1 1 5	11707 11946 14377 12356	442 420 514 458
889312	1	6	13208	3.7	489	1954 1955 1956 1957 1958 1959	1 1 1 1	11860 13360 11850 12600 16650 13290	3.7 4.1 3.5 3.7 3.4	445 490 483 447 608 459		10910 12290 12000 13310 14740 13610	393 436 434 501 567 499	1 1 1 1 1	10900 10944 12513 14759 14421 13462	379 378 471 534 543 513
89363B	1	2	17340	3.6	621	1956 1958	1	15380 19300	3.7 3.5	564 678	1	15200	577	ı	14748	5 - 7
898193	1	4	12325	3.8	461	1952 1953 1954 1955	1 1 1	11630 15050 11866 10760		451 554 440 400	1 1 1	11310 11950 10870 11040	476 520 464 457	1	10649 10562	453 453
9029 15	2	9	13234	3.9	513	1954 1955 1956 1957 1958 1959 1960	1 1 1 2 2 1	11340 14990 13180 13115 14725 11680 12310	3.9 3.8 4.0 3.8	392 613 520 501 562 439 487	1 1 2 2 1	11180 12650 15630 14430 14545 13330 13110	401 477 560 526 539 484 487	1 1 2 2 1	10900 10944 12513 14759 14421 13462 11848	379 398 471 534 543 513 453
905683	2	5	12974	3.7	482	1958 1959 1960	2 2 1	14030 11535 13750	3.5	550 407 503	1 2 1	11120 13600 14130	419 502 517	1	12927 13854	480 502
900000	2	4	13840	3.8	525	1956 1957 1958 1959	1 1 1	13790 10530 15290 15750	3.5 3.9	512 373 603 610	1 1 1	13730 14820 16140 15900	502 519 617 607	1 1 1 1	11151 10344 13941 15042	420 395 529 572
910027	4	7	12911	3.9	496	1955 1956 1957 1958 1959	1 1 2 2	12600 12450 12630 12100 12825	4.0 4.1 3.8	514 497 518 448 502	1 1 1 2 2	12740 11930 12750 12590 12020	477 488 477 475 451	1 1 1 2 2	11249 12154 12993 12917 13947	383 460 497 469 540
917922	1	3	12913	4.1	525	1954 1955 1957	1 1 1	1046G 14270 14010	4.0	428 564 583	1 1 1	10500 9990 12850	415 389 485	1 1 1	9843 10780 10344	380 412 395
920562	2	2	12520	4.2	521	1954 1959	1	11630 13410		401 561	1	10650 16400	374 625	1	1090° 15347	377 583
920871	1	1	15130	3.7	555	1959	1	15130	3.7	555	1	16540	603	1	15816	576
921858	1	1	10240	4.1	421	1955	1	10240	4.1	421	1	10270	387	1	9080	335
922288	1	2	13750	3.4	472	1958	5	13750		472	1	11130	421			
923314	4	7	15460	3.5	535	1954 1955 1957 1958 1959	2 1 1 2 1	15810 18880 14960 15280 12940	3.1 3.1 3.5	569 588 469 530 477	2 1 1 2 1	11870 10040 12340 6255 12040	482 419 472 293 445	2 1 1	10132 6927 11412 12579	399 444 430
924967	1	2	12730	3.6	452	1951 1952	1	12410 13050		446 458						
928378	1	1	2630	3.8	100	1959	1	2630	3.8	100	1	10260	406	1	9647	363
931267	1	1	9320	3.6	340	1959	1	9320	3.0	340	1	10030	378	1	9647	363
938082	1	1	10760		424	1959	1	10760		424	1	11780	411	1	12927	472
955493	1	1	13880		493	1960	ι	13880	3.6	493	1	11050	420	1	11761	436
956081	2	2	12620		535	1958 1959	1	12330 12910	4.5	495 575	1	10360 11830	460	1	12241	
960441	34	76	12502	3.9	480	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	4 7 6 7 12 9 3 6 3	9825 12786 13074 13603 11693 12965 12002 13400 12882 15993	3.8 3.9 4.0 4.1 4.0 3.7 3.5 3.8	579 490 503 546 476 512 442 475 488 630 483	2 4 5 12 8 3 6 3	100 o 0 1533 b 1464 f 133 8 8 132 f 0 10 7 5 11 o 2 5 145 o 0 125 2 3 143 d 0 123 5 3	370 532 519 513 543 444 443 517 467 548 460	2 12 8 3 6 3 8	12971 11366 11426 14226 12121 13378 12313	453 443 518 457 515

RHODE ISLAND

DAUGHTER AVERAGE BY SIRE

TABLE 15.--DAUGHTLR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHIER	AVERAGE	84 211	KE		K	ELURO AV	ERAGE 1	SY SIR	E 84	FRE SHENING	YEAR				
SIRE NU.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KECURDS NO.		TEST PCT.	FAT LB.	JOS-DAY (RECORDS NO.			YEARLY H RECORDS NO.		
						1960	HOLS	TEIN 16520	3.8	632	1	15610	556	1	15652	581
961175	5 17	31	11711	3.7	435	1950 1951 1953 1954 1955 1956 1957 1958 1959	1 1 3 3 3 5 4 9	14280 11190 13460 12187 13843 12060 12326 14268 10964 14040	3.8 3.9 3.9 3.6 3.4 5.6 3.8 5.7 3.8	536 434 525 432 478 427 469 518 415 481	1 3 3 3 4 4 9	10040 11507 12000 12623 12358 13080 11978 13240	450 457 453 448 478 491 451 487	2 2 3 4 8 1	10764 11249 12582 11619 13020 11604 13026	433 383 455 442 486 443 486
964599) 1	1	12400	3.6	450	1959	1	12400	3.6	450	1	11100	422	1	11859	439
960218	3 1	2	12785	3.6	462	1958 1959	1	13570 12000	3.4 3.8	466 457	1	12110 13240	452 487	1	12851	48 I
975892	2 1	1	17300	3.6	631	1959	i	1/300	3.0	631	1	13550	510	1	14203	536
916472	2 4	4	11130	3.8	421	1959	4	11130	3.8	427	4	11290	452	4	11401	440
976709) I	1	12860	3.9	498	1959	1	12860	3.9	498	1	11450	427			
970710	7	10	11323	3.8	424	1958 1959	3 7	10820 11320	4.0 3.7	429 420	3 7	14143 12817	525 499	3 5	13313 12919	509 503
98/809	2	6	13127	3.9	507	1955 1956 1957 1958 1959	1 1 1 2 1	13900 13930 11640 13675 14160	3.8 4.1 3.9 3.7	512 526 476 521 519	1 1 1 1	13570 15700 16390 16390 13500	502 559 608 608 506	 	10944 12513 14759 14421 13462	398 471 534 543 513
988462	2 1	2	20315	3.7	755	1958 1960) 1	20750 19880	3.8 3.6	790 720	1	13600 11310	504 386	1	15903	583
997481	1 1	1	13200	4.1	536	1959	1	13200	4.1	536	1	13020	545	1	12284	535
1001748	3 2	2	13795	3.5	478	1958	2	13795	3.5	478	2	16340	554			
1006614	1	1	11270	3.9	438	1959	1	11270	3.9	438	1	10010	377	1	9647	363
1006866	5 1	1	16080	3.4	545	1958	1	16080	3.4	545	1	13800	478			
1007194	2	2	10640	3.7	390	1958 1959	1	9960 11320	3.8 3.5	378 401	1	11340 12530	399 486	1	12241	472
1007680	0 10	16	14435	3.8	548	1957 1958 1959 1960	1 7 5 3	13150 15014 14672 12907	4.1 3.8 3.7 4.0	537 567 549 510	1 7 5 3	16260 17034 15856 14530	607 646 606 551	1 7 5 1	13167 13941 15042 11521	466 529 572 433
1025792	2	2	14235	4 - 1	580	1960	2	14235	4.1	580	2	13965	536			
1026115		1	8710	4.0	345	1959	1	8710		345	1	13030	496	1	14203	536
1028123		1	13040	3.4	449	1960	1	13040	3.4	449	1	10420	398	1	11761	436
1028928	3 8	11	12368	3.9	477	1957 1958 1959	2 4 5	12140 12995 12144	4.1 3.8 3.9	495 483 468	2 4 5	14150 13728 13300	533 538 499	2 4 3	14590 13350 12477	524 504 465
1030634	• (13	14299	3.7	527	1954 1955 1956 1957 1958 1959	1 2 2 5 2	12350 14655 16035 13938 14610 16650	3.8 3.6 3.8 3.5 3.8	471 528 563 532 511 625	2 2 5 2 1	12355 13040 12074 13820 13530	454 476 452 527 574	1 1 2 5 2 1	10061 10715 12252 11565 12192 12611	356 385 442 428 469 541
1030640) 1	2	15990	3.7	587	1958 1959		15440 16540		560 614	}	14160 12510	519 514		14846 13625	547 524
1031501	1	2	17790	3.6	643	1956 1958	1	18760 16820		662 623	1	12560 16770	440 650	1	8949 15903	
1033024	1	1	14120	3.5	501	1959	1	14120	3.5	501	1	12180	474			
1034467	7 1	1	17130	3.6	615	1959	1	1/130	3.6	615	1	11800	460			
1034472	2 1	2	13 150	3.8	498	1952 1953	ì	10220 16080		399 596						
1036233	3 6	7	9280	3.9	366	1955 1958 1959 1960	1 2 2 2 2	9520 9995 10070 7600	4.1 3.7	392 401 374 322	1 2 2 2	12470 11510 11115 10220	467 429 410 403	1 1 1 2	11249 12851 9647 10301	383 481 363 395
1036234	4 14	5	10330	3.9	392	1952 1954 1955 1956 1958	1 1 1 1	7670 12270 9770 13330 9300	4.0 3.9	337 494 384 458 335	1 1 1	10330 10570 11200 12640	409 393 424 466	1	9843 10780 11336	412

RHOUE ISLAND 144

1271758

1

1 10590 3.4 357

1960

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREGUING ORGANIZATIONS--GROUPLO BY BREED,

OY YEAR OF FRESHLMING--RECORDS FROM THIS STATE ONLY

	OY YEAR	OF FRESH	HLN ING	RECO	KDS FR	OM THIS	STATE ONL	_Y								
	DAUGHTER	AVERAGE	BY 51	КĿ		К	ECORD AVE	ERAGE E	Y SIR	E BY	FRESHENING	YEAR				
SIRL NO.	UAUGHTERS NO.	KECUROS №0.		TLST PCT.	FAI L8.	FRESH YEAR	RECORUS NO.		TEST PCT.	FAT L8.	305-DAY RECORDS			YLAKLY H RLCOKOS NO.		FAT
							HOLS	TEIN								
1038118	3 I	1	10100	3.8	389	1958	1	10100	٥.٥	369	1	10740	436	1	12241	472
1040368	3 9	10	13457	3.8	510	1959 1960	8 2	13985 10005	პ. ს პ. ს	528 361	1	12641 13140	453 489	4 1	13396 11848	499 453
104250	1 1	2	11995	3.9	461	1958 1966	1	11490 12500	3.9 3.6	448 473	1	13400 13670	494 507	1	11336 13200	415 494
1045647	7 1	2	13135	3.8	502	1958 1959	1	12320 13950	3.1 3.9	456 548	1	14000 17630	515 648	1	15816	576
1049547	7 2	2	14105	3.6	506	1959	1	14105	3.6	506	2	11385	442	1	11857	439
1056882	2 7	9	14861	3.7	553	1957 1958 1959 1960	1 1 3 2	14640 15490 14786 14965	3.8 3.7 3.7 3.8	554 579 552 552	5 2	13008 12240	564 501 463	1 3 2	8687 14010 13614	532 523
106191	1	1	15260	3.8	586	1959	1	15260	3.8	586	1	114∠0	531	1	12175	532
1071095	5 9	16	11186	3.8	423	1958 1959 1960	9 6 1	9753 12112 12180	3.0 3.9	370 459 478	6 6 1	10890 10167 10050	412 385 398	6 1	9894 10789	376 417
10859 78	3 1	1	13520	3.6	435	1960	1	13520	3.0	485	1	10380	396	1	11761	436
1086326	5 1	2	13945	3.8	523	1958 1959	1	13590 14300	3.c 3.7	515 530	1	13610 12480	464 465	1	11129 12143	397 456
1090258	В 2	2	14375	4.0	569	1959	2	14375	4.0	369	2	13510	522	1	11723	441
1091298	9 1	2	14670	3.5	516	1956 1958		15560 13780	3.4 3.6	536 495	1	9470 9470	411 386	1	11151 12241	420 472
109421	3 30	39	13142	3.7	#84	1955 1957 1958 1959 1960	2 1 6 25 3	9930 12700 13938 13832 11992	3.7 3.6 3.7 3.7	366 476 504 518 435	2 1 6 23 3	11445 12790 13058 13032 12637	466 500 485 492 460	2 1 6 21 4	10906 11194 12524 13210 13489	418 457 462 502 511
109430	5 1	1	15610	3.9	606	1959	1	15610	3.9	606	1	15910	607	1	15042	572
109837	1 9	11	11374	3.9	43∠	1954 1955 1956 1957 1958 1959	1 1 1 3 3 1	8290 7170 13790 10380 14070 10970 9160	4.3 3.9 3.6 3.8 3.0 3.9 4.2	355 283 492 396 552 419 385	1 1 1 3 3	10580 11640 11510 11980 13450 10827 9260	455 485 462 436 510 420 300	1 1 1 3 2 1	10649 10562 12154 12252 10726 10780	458 453 460 483 423 417
110075	9 10	11	12528	3.7	460	1958 1959 1960	1 8 2	16460 12601 9070	3.7 3.7 3.5	607 474 287	1 8 2	17320 13766 8950	611 513 364	1 5 1	13047 13971 11936	523 522 531
111641.	3 1	1	12640	4.2	537	1960	1	12640	4.2	537	1	10060	397	1	10780	417
112170	6 3	3	17433	3.6	633	1959	ذ	17433	3.6	633	3	11650	430	3	13727	497
112491	5 3	3	13570	3.7	499	1959	3	13570	3.7	499	3	15760	605	3	15042	572
112539	5 2	2	12940	4.0	513	1958	2	12940	4.0	513						
114076	3 1	1	10490	3.8	402	1960	1	10490	3.8	402	1	11190	425	1	11761	436
114186	4 19	28	13452	3.8	506	1957 1958 1959 1960	2 18 5 3	14770 13726 13138 11235	3.8	513 524 492 420	13 5 2	12655 12250 10582 9695	491 464 395 385	2 6 5 3	11969 12241 11587 11721	435 497 447 458
114808	7 24	29	14598	5.7	542	1958 1959 1960	11 16 2	1460∠ 1459∠ 14010		553 541 498	11 16 1	13817 12739 15340	529 461 558	10 11 2	13431 13974 13985	510 522 516
115856	9 1	1	12220	3.8	461	1958	1	12220	3.0	461	1	11160	421			
116311	6 I	1	14750	3.5	52.	1959	1	14750	3.5	520	1	12100	471			
116857	5 I	2	12200	3.7	451	1958 1959	1	12576 11030		455 446	1	13710 12430	496 461	}	11129 12917	397 483
117957	5 1	1	14960	3.7	553	1960	1	14960	3-1	553	1	11250	42 I	1	12143	456
121090	9 1	1	129b0	3.8	491	1959	1	12980	3.8	491	1	13050	550	1	12611	54.1
121695	7 2	2	13105	3.9	510	1959	2	13105	3.9	510	2	12720	480			
122452	1 1	1	9630	3.7	360	1960	1	9630	3.7	360	1	13910	517	1	12143	456
127176	0 1		10100	2 1.	767	1010		10500	7 1	4. 7		10500	1.01		117/1	1. 21

1 10590 3.4 357

1 10590 405

1 11761 436

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-DAY COR RECORDS (MILK	YLARLY HE KELORUS NO.	RD AVE MILK LB.	EAT
							JER	SEY							
35041	1	5	6718	5.3	362	1947 1948	2	8740 7350		478 406					
						1949	i	6630		346					
						1950	- 1	2130	4.8	102					
36137	2 1	4	10780	5.3	567	1949 1950	1	9660 8 7 90		533 500					
						1951	i	11360		642					
						1952	i	13310		594					
427546	5 1	2	7850	5.9	461	1950	1	8180	6.1	499					
						1952	1	7520		422					
455325	5 1	1	6850	5.7	392	1952	1	6850	5.7	39∠					
46193	5 1	14	6505	4.9	321	1952	1	6790	4.6	311					
						1953	1	6760		327					
						1954	1	6610		349					
						1956	1	6100	4.9	298					
46296	1 1	1	6290	4.9	311	1955	1	6290	4.9	311					
467630	0 1	1	4290	14 - 14	187	1953	1	4290	14 14	187					
488287	7 1	3	11107	4.8	532	1955	1	12520		594					
						1956	1	8490		427					
						1957	1	12310	4.7	574					
503050	0 2	2	6250	5.1	318	1955	1		5.2	377					
						1956	1	5190	5.0	258					
50985	5 1	- 1	7220	4.9	355	1960	1	7220	4.9	355					
509910	8 0	16	8144	5.7	457	1953	5	8140		4/9					
						1954	Ц	9258		497					
						1955	3	7997		452					
						1956	!	5100		279					
						1957		9420		491			1	8938	1. 0.4
						1959	2	8455	5.2	442			'	0438	400
514980	0 1	1	9080	5.1	460	1960	1	9080	5.1	460					
55726	8 1	1	6500	5.2	336	1959	ı	6500	5 • 2	336					

RHODE ISLAND 146

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE 1. ARTIFICIAL BREEDING OR ANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

UAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RECOROS NU.	MILK LB.			FRESH YEAR	NECUROS NO.		TEST PCT.			MILK		YEARLY HE RECOROS NO.		FAT
							BROWN S	Swlss								
59585	1	2	12180	5.9	480	1958	2	12180	3.9	480						
113594	1	1	12910	4.0	511	1959	1	12910	4.0	511	1	8680	345	1	9756	3/19

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFI IAL BREEDING ORGANIZATIONS--GROUPLO BY BRLLO, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.	MILK LB.		FAT LB.	SUS-UAY (RECORUS NU.			YEARLY HI RECORDS NO.		FAI
							AYRSH	fire								
4 0 4 0 3	3 12	34	9521	4.2	400	1947 1948 1949 1950 1951 1952 1953	25 3 2 1 1 1	9688 10120 8870 9590 7900 10790	4.3 4.4 4.5 4.1 4.1 4.1	414 434 387 409 322 438 414	1 1 1 1 1 1 1 1	10640 12670 8620 10560 10070 8640	386 478 351 441 408 361	1	7 254	374
46522	2 23	88	9009	4.2	375	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	25 12 15 11 8 6 4 3 2	8960 9105 9102 9525 9614 9403 10015 8883 9155 10730 9970	4.2 4.1 4.2 4.0 3.9 4.0 3.8 5.8	3a1 379 376 398 382 367 395 347 343 408 395	7 3 4 4 3 3 3 2	10326 10127 9060 8193 9303 9030 9977 8220 8300	414 398 356 348 370 362 414 349 344	3 2 1	10777 8142 8469	427 354 347
46082	2 14,	\$3	9562	4.0	380	1947 1948 1949 1950 1951 1952 1953 1954	17 3 7 9 3 4 3 1	9534 9968 10494 9623 9183 10973 9757 10300 11700	3.9 4.2 4.3 4.2 4.1 4.0 4.0	379 413 447 401 380 443 390 435 465	2 2 1 2 1 2 1 1	8415 10875 10250 10275 11310 9305 10390 9420 8250	352 397 444 426 455 354 399 401 343	1 1 1	11358 8142 8469	445 354 347
52394	4 3	14	8836	ц.ц	389	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 1 1 1 1 1 1 1	8337 8413 9690 8650 10380 8810 9540 10990 8780 8420	4.05004 4.0504 4.0532 4.034 4.034	366 380 440 401 473 377 411 466 392 369	 1 1 1 1 1 1	9160 10200 9930 11510 10450 8370 9630 8980 9030 9240	355 397 385 451 416 339 381 369 357 374	1 1 1 1 1	9102 9625 8775 9047 9320 8393 8371	374 383 344 346 376 336 336
53833	3 5	25	10744	4.0	429	1949 1950 1951 1952 1953 1954 1955	2 3 4 4 2 4 2	10775 9323 11225 10848 11530 11395 10845 10340	4.0 4.0 4.0 3.9 3.8 3.9 4.0	434 376 446 433 451 428 420 413	1 2 3 2 3 2 3 1	8110 7815 10080 7930 8677 10310 9957 8970	355 335 410 329 352 421 393 355	3 2 3 1	9618 9205 9458 9047	461 371 365 346
53909	7	25	9233	4.0	366	1947 1948 1949 1950 1951 1952 1953	5 5 3 4 3 3 1 1	9216 8662 11227 10680 10130 8247 8850 6810	4.0 4.0 4.0 4.0 4.0 4.0 3.9 3.9	366 349 439 427 404 317 345 249						
54561	1 12	33	10597	3.9	408	1947 1948 1950 1951	28 3 1 1	11056 14280 12430 11900	3.9 3.6 3.5 3.5	430 519 429 412						
55u 33	3 7	17	8956	4.3	387	1950 1951 1952 1953 1954	4 1 3 2 1	9538 9413 9403 10590 7490		402 416 413 476 358	1 1 1	8610 8750 9230 8600	362 362 382 356	1	9254	374
57299	9 14	34	8400	4.0	334	1947 1948 1949 1950 1951 1952 1953 1954 1955	25 1 1 1 1 1 1 1	8136 9230 11260 13420 8130 11860 5780 11320 8050 10670	4.0 3.8 3.9 4.1 3.8 3.6 3.5 4.1 4.0	327 355 440 554 309 456 200 470 322 426						
59047	7 31	88	9503	4.0	384	1947 1948 1949 1950 1951 1952 1953 1954	12 12 10 15 13 13 4 6	10037 9419 10116 10541 10424 10542 9813 8582	4.0 4.0 4.0 4.1 4.1 4.2 4.2	405 382 405 428 430 441 409 364	i 2 1 1 2	8810 9860 9310 8710 9410	370 393 385 363 388	1 2	9254 8 9 22	374 369

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

148

DAUGHTER AVERAGE BY SIRE

STRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KLCOROS NO.		TEST PCT.	FAT L8.	305-DAY (RECOROS NO.	MILK	FAT	YLARLY HE RECORDS NO.		FAT
						1955 1956	AYRSI 2 1	9660 9640	4.1 3.9	393 372						
60741	1	2	10840	4.5	491	1954 1956	1	11200 10480	4.4	498 483						
61040	5 10	31	9300	4.2	388	1949 1950 1951 1952 1953 1954 1955 1956 1957	2 3 5 7 4 3 2 2 2	9670 10940 10360 8389 8713 9247 10275 12215 12350 10410	4.0 4.1 4.1 4.2 4.1 4.5 4.5 4.5	389 453 429 349 351 376 460 519 523 432	1 2 2 1 1 1 1	9700 10755 9140 9220 11000 10660 11160	390 424 364 380 442 435 468 503	2 1 1 1	9614 8785 10464 10638 10835 12219	392 359 425 441 452 514
61986	5 8	32	9927	4.2	411	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	1 3 6 4 4 4 3 1 1	8290 8670 9743 10390 9383 11115 10083 10627 8700 10100 11410	4.0 4.2 4.4 4.1 4.2 4.1 4.2 4.0 3.9 4.4	329 363 428 427 393 456 419 424 338 443	4 2 2 2 3 3 1 1	85 18 8690 9720 10485 9540 10303 8870 9600 8920	370 360 387 418 383 419 342 379 366	3 3 1 1	9443 9065 8775 9047 9320	386 367 344 346 376
6223:	3 16	42	8917	4.1	361	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 11 9 5 3 1 2 3	9850 9672 8536 8701 7758 8860 9650 11050	4.2 4.1 4.2 4.1 4.1 4.2 4.0 3.7	406 393 360 356 316 372 410 445 405	2 4 9 6 4 3 1 2 3	10580 9863 9917 9240 8575 9163 9150 9215 9107	443 400 400 378 356 372 368 379 370	9 6 4 3 1 1 1 3	9378 8756 8483 8884 9647 8404	385 360 354 367 397 334 380
6261	3 5	9	8859	4.1	363	1953 1954 1955	2 4 3	8955 9080 7337	4.3 4.0 4.0	383 364 290	1	14240 10530	540 458	1	10366 10617	408 440
6263	5 2	5	9068	4.0	366	1954 1955 1956 1957	1 1 2 1	8220 9870 9370 7930	4.0 3.7 4.0 3.7	332 367 378 296	1 1 1 1	10510 9210 9360 9060	434 393 384 355	1 1 1	10126 8186 8622	414 337 352
6314	4 7	13	8745	4.0	349	1950 1951 1952 1953 1959	2 3 4 3 1	11045 9320 8723 7570 8320	4.0 3.9 4.1 4.0 4.1	441 366 353 299 342	2 2 1	10685 9225 7310	430 373 302	2	9434 8426	383 347
6314	7 40	80	8998	4.2	378	1953 1954 1955 1956 1957 1958 1959 1960	6 11 19 15 9 6 12 2	9525 8985 8143 8500 9363 9443 10338 9745	4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.1	397 377 342 354 390 403 431 399	3 5 11 10 8 6 11	9643 9970 8754 9346 9075 9205 9887 11880	406 400 358 381 363 372 399 472	2 5 11 10 8 6 12	9380 8687 8775 8851 9600 10284 10161 11728	375 360 359 368 392 404 410 480
6342	6 22	48	9441	4.1	385	1952 1953 1954 1955 1956 1957 1958 1959	7 11 11 10 2 2 2	9757 9133 9880 9325 6565 7550 8305 10210	4.1 4.2 4.1 4.1 4.2 4.0 3.9 3.8	394 378 407 384 270 300 324 391	4 5 5 2 2 4	10043 9326 8648 9120 9080 9070 9320	393 374 337 372 363 368 385	5 5 5 2 2 2 1		389 390 354 347 397 412 400
6488	5 4	14	8832	4.0	351	1951 1952 1953 1954 1955 1956	2 3 3 2 2 1	9320 8953 9243 8390 7115 7160 6620	4.1 4.1 3.7 3.8 3.9 3.8	377 365 380 315 262 279 249	1 1 1 1	10450 9240 8760 7120 8980 9320	424 379 370 303 367 377	1	9865 9363 7990 8066 9647	34 5 34 7
6536	6 1	5	8164	4.0	323	1948 1949 1950 1951 1952	1 1 1 1	8530 7770 7140 8130 9250	3.7 4.1 4.2 4.0 3.9	314 315 297 324 363						
6554	8 I	8	11533	4.3	494	1950 1951 1952 1953 1954 1955		13180 13280 13890 13300 11976 10950	4.5 4.3 4.4 4.2 4.0	595 577 598 584 506 441						

TABLE 15.--DADGHTLK-AVLKAGE OF SIRLS IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORUS		TEST PLT.		FRESH YEAR	RECORDS			FAT LB.	305-BAY (RECORDS		FAT	YEARLY HE RECORDS NO.		FAT
						1956 1957	AYRS	9450	4.Z 4.1	394 253						
6576	1 6	17	10250	4.0	410	1948 1949 1950 1951 1952 1953 1954 1955	2 4 3 3 1 1 1	10205 9960 10660 11960 12520 11880 12760 12280 9420	4.1 4.0 4.3 4.2 4.0	403 408 428 475 538 500 509 477 372	ı	10020	405	1	10758	436
6717	la la	11	10664	4.0	422	1951 1952 1953 1954	2 3 2 4	10420 13030 11060 10678	4.0 3.8	426 518 413 425	2 3 2 3	9790 10980 8560 8783	390 434 357 363	2 3	9614 8785	39? 359
6747	9 2	ц	9005	4.0	364	1954 1955	2 2		4.0 4.0	343 384	2	9590 87∠0	390 353	2 2	9407 8905	387 362
6775	7 3	4	11225	4 - 4	490	1951 1954 1955	1	10710 12450 12200 8830	4.3	478 535 523 590	}	10850 12040	438 510	1	10464 10638	4∠5 441
7010	4 1	6	11068	3.7	400	1953 1954 1955 1956 1958 1959	1 1 1	9400 10670 10120 8760 11010 16450	3.9 3.0 3.5 3.4	356 418 367 304 372 620	1 1 1 1 1	8720 9600 8190 9200 9920 10950	357 393 348 373	1 1 1 1 1	8742 9407 8905 9211 10573 11543	349 387 362 364 427 471
7025	9 6	16	9021	4.2	374	1954 1955 1956 1957 1958 1959 1960	i i i i i i i i i i i i i i i i i i i		4.0 4.0 4.0	347 350 418 381 391 342 300	1 3 2 2 3 2	8160 8823 9450 10165 9140 8925 10760	328 348 374 395 354 347 403	1 2 2 2 2 3 2	6627 9341 10132 8661 9025 8715	257 374 401 33d 358 349
7036	8 3	13	8577	4.2	361	1953 1954 1955 1956 1957 1958 1959	2 3 3 2 1 1	8350 8680 9230	4.2 4.2 4.5 4.4	384 384 353 366 413 241 421	1 1 1 1 1	6900 8510 7970 9160 10150 10200 8850	269 339 317 376 415 424 368	1 1 1 1 1	7488 7456 8371 8295 9941 10431 9701	288 292 379 331 407 425 400
70/6	0 23	83	8904	4.3	381	1952 1953 1954 1955 1956 1957 1958 1959	1 14 18 17 12 9 8 3	9984 8926	4.4 4.3 4.2 4.4 4.5	354 425 390 355 390 402 414 449	8 9 10 8 8 8 8 3	10013 9677 8690 9951 9426 10240 11160 8300	40 3 39 7 35 2 40 6 38 9 44 6 44 4 34 2	8 10 10 8 8 4 2	9768 9561 9103 9704 9543 10189 10655 9941	403 372 372 378 370 420 442 407
7097	5 8	33	10655	4.2	437	1947 1948 1949 1950 1951 1952 1953 1954 1955	2 6 7 1 5 2 4 4 2	9365 9572 10737 7530 12418 14030 12720 12613 11260	4.4 4.5 4.5 3.9 3.7 4.0	382 417 456 336 485 519 513 511 438	2 4 1 4 1 3 3 3	10040 9395 9000 9735 10620 10073 9267 9555	413 409 372 395 431 405 380 384	3 3 2	10195 8571 8829	4 i 0 35 7 36 I
7119	1 7	15	8822	3.8	333	1950 1951 1952 1953 1954 1955 1958 1959	1 3 3 3 2 1 1	10450 8077 9337 8630 8105 9600 13050 10460	4.0 3.9 3.7 3.5 3.8 3.6	394 317 339 326 306 363 474 346	i i i i	9570 11300 9550 10200 11320 10950	386 448 385 403 463 430	1 1 1	9614 8829 10813 11347	392 361 445 453
7176.	3 17	36	8568	4.5	367	1950 1951 1952 1953 1954 1955 1957 1956 1959	1 5 8 8 6 3 1 2 1	6450 8992 8494 8486 8655 8210 9810 10020 7830 8590	4.2 4.3 4.3 4.1 4.1 4.4	279 377 365 366 372 346 430 446 326 352	1 4 2 1 1 2 1	9230 10278 9785 10130 10030 8820 7890 7140	393 424	4, 2 1 1 1	9565 8862 9123 9341 10126 8426 7325	385 361 367 384 412 347 361
7247	8 I	2	7230	4.0	290	1954 1955	1	7250 7210		293 286	1	10340 10940		1	10268 10464	425 425
7329	3 25	48	8883	4 = 1	360	1952 1953 1954 1955 1956 1957	կ 11 12 4 կ	9715		351 348 393	1 3 4 4 5 3	11170 9767 9690 9158 9270 9000	401 405	2 4 4 2 3	9854 9068 9031 9925 9581	390 378 375 413 369

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY ORLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.		SOS-DAY RECORUS NO.	CONTEMP MILK LB.	FAT	YLARLY HI RECORUS NO.	RO AVE MILK L8.	FAI
						1958 1959	AYKSI 2 2	9490 13955		379 581	2 1	9460 8540	381 353	2	10066 9701	
7368L	1	1	7550	4.2	314	1955	1	7550	4.2	314	1	9010	472			
7402	10	16	8591	4.0	345	1954 1955 1956 1957 1958 1959	2 2 3 2 1 4 2	8380 7745 8830 8875 8270 8563 9955	4.2 4.1 4.1 4.4 4.2 3.8 3.7	351 324 361 387 345 328 388	1 3 2 1 4 2	9230 7650 7953 9355 8410 8765	379 310 407 373 344 354	1 1 3 2 1	8785 9865 9639 9826 9712 8900	463 392
74223	3 2	2	7050	4.5	318	1952 1955	1	7280 6820	4.1 4.9	298 337	1	9520	409	1	9516	423
74539	5 1	1	9070	4.2	384	1958	1	9010	4.2	384	i.	9080	370	1	9396	3/9
76613	3 (9	183	10767	4.1	437	1952 1953 1954 1955 1956 1957 1958 1959 1960	1 13 19 35 26 29 25 27	13420 10755 10374 10734 9765 10554 10496 11269 9933	4.5 4.0 4.2 4.1 4.1 4.1 4.0 4.1	598 425 431 436 402 429 419 462 416	7 7 19 18 20 21 26	9727 8500 9096 8790 9593 10276 10662 10913	370 355 368 374 377 413 435 441	6 7 13 15 20 19 26 2	9667 8807 9778 9040 9661 10108 10937	375 366 401 379 383 403 447 423
7683	1	5	7954	4.3	337	1949 1950 1951 1952 1953	1 1 1 1	8110 7280 7600 6280 10500	4.4 4.5 4.1 4.3	353 325 309 268 432	1 1 3 1		447 332 499 445 387	1	1013/	436
77942	? I	3	10610	4.0	426	1955 1957 1958	1 1 1	12520 7240 12070	4.2 3.0 3.9	530 277 470						
78114	16	32	9318	4.0	3/2	1954 1955 1956 1957 1958 1959	2 3 7 4 7 8	10000 8217 10029 10885 10433 9490 10070	4.1 3.9 3.8	429 337 395 419 414 386 401	1 2 4 2 5 8 1	9900	455 381 439 403 440 394 375	1 2 3 2 3 8	10617 9570 10664 10088 10079 9947	446 370 438 414 409 412
78927	1	1	9520	4.1	388	1955	1	9520	4.1	338	1	9370	406	1	9516	4/3
79588	3 1	3	9683	4 . 1	396	1953 1954 1955	 		3.9 4.3 4.1	378 418 393						
80379) 14	22	9201	4.0	366	1957 1958 1959	5 (10	10266 10181 8942	4.0 4.0 4.0	411 413 354	5 6 10	7344 10007 9138	405 412 367	5 6 10	9727 10370 9949	399 426 402
82620	2	2	9260	4.1	378	1959 1960	1	9750 8 77 0	4.4 3.7	432 324	1	11380 8730	470 362	1	11358 9941	470 409
82628	3 10	16	8740	4.1	351	1955 1956 1957 1958 1959	1 4 1 2 8	7080 7740 7380 10170 9969	3.8 4.1 4.3 4.4 3.9	2/1 313 320 454 394	1 3 1 2 (8100 9137 10150 10305 9781	324 374 432 426 399	1 3 1 2 7	8371 9341 10628 10154 10095	329 370 439 422 410
8422	5 5	7	9991	3.8	376	1957 1958 1959 1960	1 2 3 1	5400 8080 12277 12120		187 333 474 443	1 2 3 1	9340 10060 9030 9330	413 418 361 331	1 2 3 1	8927 9767 9576 7494	366 400 352 367
86390	58	75	8883	4.2	369	1956 1957 1958 1959 1960	4 7 17 37 10	6673 8856 9416 8872 9927	4.1 4.2 4.0 4.2 4.2	275 368 378 370 416	2 5 16 37 9	9545 10152 10285 9599 9669	402 411 424 389 390	2 5 14 37 9	8470 9651 10171 10000 10230	347 394 417 468 421
86898		41	9072	4.0	364	1955 1956 1957 1958 1959 1960	7 10 7 5 8	8360 8589 9480 10198 9763 9065	3.9	338 343 384 420 393 346	6 7 6 3 8	9448 9693 10313 9912 10478 10073	386 405 422 400 426 398	6 6 5 8 1	9685 10014 11218 9793 10352 8905	
88679		1	6150	4.5	276	1954	1	6150	4.5	276						
9188		16	9068	4.3	388	1959	16	9191	4.0	392	15	9353	376	16	9907	
9347	3 1	ц	10618	4.3	450	1955 1956	1	10120 10150		438 445	1	9270	387 396	2	8186	37

TABLE 15.---DAUGHTUR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

C t ni	DAUGHTERS	u.E.C.ou.D.C	MALL	FEET	FAT	FOFCH	A560006	W 7 8 W		F 4.7				YEARLY H		
SIRL				TEST		FRESH	RECORUS		TEST	FAT	RECORDS		FAT	RECOROS	MILK	
NO.	NO.	NO.	LE.	PET.	LB.	YEAR	NO-	ra.	PCT.	LB.	и0.	L8.	L8.	·40 =	LB.	L8.
							AYRS									
						1958	1	12080	4 . 2	502	ı	13040	518		11968	404
9442.	3 5	6	6569	4.2	274	1957	ı	6770	4.1	274	1	12910	589	1	11360	426
						1958	2	8380	4.3	354	2	9/70	377	2	11712	451
						1959	3	5897		248	3	9470	374	3	9781	382
						****	,	30,,		2.00			3		,,,,,	300
9538	4 24	29	8229	4.3	355	1957	1	10110	4.5	458	1	10050	415	1	9134	385
						1958	5	7858	4.2	330	4	9833	396	4	9677	374
						1959	20	8202	4.3	354	19	9712	398	20	10479	4 < 8
						1960	3	6647	4.6	363	5	11643	453	3	11075	444
10152	7 1	1	9420	4.5	424	1959	1	9420	4.5	424	1	9520	369	1	8164	329
10260	7 1	2	3665	4.0	147	1959	1	4780	4.0	193	1	10290	397	ı	10083	397
						1960	ı	2550	3.9	100				1	9603	375
104768	В 2	2	6775	4.1	287	1959	1	9530	4.4	421	1	9510	369	1	8164	327
						1960	1	4020	3.8	153				1	8121	313
10572	i i	1	8770	3.7	326	1959	1	8770	3.7	326	1	9800	407			
106626	0 1	1	6720	3.8	257	1959	1	6720	3.0	257	1	85/0	340	1	9516	379
10669	6 1	1	5 7 5 0	4.4	252	1959	1	5750	4.4	252				1	8905	400
11075	в і	1	11820	4.2	494	1959	1	11820	4.2	494	1	10710	418	1	9908	366

TABLE 15.---DAUGHTLR-A/ERAGE OF SIRES IN SERVICE IN RTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	UAUGHIEK	AAFKAGE	01 31	ν			ECONO AVI	CRAGE (DI 31K		I KESHCIATAG					
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-0AY (RECURDS NO.	ONTLMP MIEK LB.	FAT LB.	YEARLY HI RECORDS NO.	MILK L8.	FAT LS.
							GUER	NSEY								
177128	3 2	5	6183	4.9	295	1947	5	6438	4.8	303						
192368	3 6	14	7063	4.8	341	1947 1948 1949 1950 1951 1952	7 2 2 1 1	6777 8065 10270 8090 9240 9970	4.7 4.8	331 378 489 380 448 488						
192478	B 1	1	7220	4.6	334	1947	1	7220	4.6	334						
197360	28	54	7854	5.0	390	1947 1948 1949 1950 1951	45 2 5 1	7897 9020 10012 13520 10530	5.1 4.8 4.9 4.4 5.2	403 436 483 598 545						
205109	9 1	7	8869	4.7	413	1947 1948 1949 1951 1952 1953	2 1 1 1 1	8935 9780 9780 8910 7240 8500	4.7 4.7 4.7	460 457						
208969	2	2	8605	4.4	369	1947	2	8605	4.4	369						
211212	2 3	15	8744	4.9	427	1947 1948 1949 1950 1951 1952	10 1 1 1 1	5310 9770								
219946	5 1	2	9495	4.0	378	1947	2	9495	4.0	378						
22397	1 1	3	7123	4.3	305	1950 1951 1952	1 1 1	7490 7160 6720	5.1 3.8 3.9	383 274 259						
224975	5 10	27	11576	4.3	493	1947 1948 1949 1950 1951 1952 1953 1954	4 3 2 2 2 3 2	12100 11035 12033 12165 9535 14600 13187 12510	4.3 4.1 4.6 4.4 4.1 4.2 4.0	477 500 548 410 598 540	1 1 2 3 2	11135 10870 8660 11335 11103 11200 11475	529 321 469 459 471	2	11118 11206 11314	481
227402	2 1	ц	8708	5.0	432	1947 1949 1951 1952	1 1 1	8540	4.7 5.1 4.9 5.1	347 435 443 501						
228304	6 27	98	8232	ц., 5	370	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1958 1960	1	8055 8453 8382 9013 8861 10745 10670 9868 10310 9050	4.3 4.3	356 360 366 376 481 460 427 432 372	2 2 3 3 4 3	7560 8698 9910 8060	437 422 456 438 405 433 357 419 467 371	1 Ա	8171 8535 8554 8197 8666 8818	393 413 371 389
229732	2 11	37	9782	4. 4	432	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	3 4 2 3 1 2 2 1 2		4.5 4.6 4.4 4.7 4.5 4.5 4.5 4.3	412 472 460 515 452 530 498 631 581 627	1 1 2	8630 8570 8040 8000 9170 9380 9040 6885	398 409 362 434 453 457	1	8153 8927 8469	432
23018	9 1	2	8085	5.0	400	1947 1949	1	9710 6460	5.0	4o9 322						
23120	2 30	69	7926	4.7	367	1947 1948 1949 1950 1951	23 7 9 11 <i>t</i> 5	7701 7639 7859 8609 9159	4.8 4.6 4.5 4.6 4.4	365 347 352 375 407	2	8553 8230 8965 8132 3785 8776	378 391 386 416			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.			YEARLY H RECOROS NO.	MILK	
						1953 1957 1958 1959	GUERI 1 1 1	9350 6700 6720 11660	4.4 4.4 4.3 4.5	406 292 290 530	3 1 1 1	8267 10670 9570 9520	376 501 421 458	2 	8050 10311 11532 9723	370 434 473 470
23239	1 7	19	8337	4.6	383	1947 1948 1949 1950 1951 1952	10 2 1 2 2 1	8151 10575 10370 10590 10045 8580 6710	4. / 4. 8 5. 0 4. / 4. 6 4. 5 4. /	381 508 520 497 457 384 318	1 1 1 1 1	8420 7970 9750 9560 9590 8310 7550	362 346 510 437 418 384 357	1	8709	401
24098	2 1	3	9760	4.8	472	1947 1949	2	8975 11330	4.8 4.9	429 559						
24413	2 18	76	7813	14 <u>1</u> 4	344	1947 1948 1949 1950 1951 1952 1953 1954	36 10 11 5 3 5 3 2	7299 8780 8599 8426 8170 10324 9820 9180 9080	4.5 4.4 4.4 4.4 4.4	323 388 375 381 357 446 440 367 405	1 2 1 2 2 2 2 1	8860 8670 8160 8480 8555 8560 7850 6890	403 392 392 414 409 411 370 333	2 1 1	9134 7979 6867	439 389 325
24701	7 37	89	7312	4.9	36∪	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	3 2 13 13 19 13 9 9 4 1 2	6663 7640 7463 8371 7471 7093 8912 8449 8135 7400 8660 9250	4.7 5.0 5.0 4.8 5.0 4.9 5.0 4.9 5.0 6.7 4.8 5.2	314 381 372 402 376 344 446 416 405 493 424 482	1 3 5 8 5 9 8 4 1 2	8200 10847 9754 8509 8010 8591 8628 10560 12740 10965 12590	552 477 409 395 403 395 448 439 473	8 7 4 1 2	9042 9260 9887 12491 9718 11936	432 423 420 456 416 483
24878	8 3	9	7846	4.8	381	1950 1951 1954 1955	3 2 1 3	830 / 7415 7460 7107	4.8 4.5 4.6	404 352 320 329	2 1 2	7950 8220 7345	377 379 384	1 3	6649 6813	316 3∠0
24 42 2	7 1	3	14577	4.3	629	1954 1955 1957	1 1 1	14340 16760 12630	4.0 4.4	633 675 578	1 1 1	10230 11840 12070	495 552 613	1 1 1	10551 11009 11260	532 543 556
25124	8 1	6	10750	5.6	602	1950 1951 1952 1953 1955 1956	1 1 1 1 1	7280 9170 11840 12670 13100 10440		423 541 603 788 665 593]]] 1	9890 10190 9590 10060 11060 10630	494 474 482 482 513 522	1	11009 11957	
25311	5 1	2	6745	4.5	304	1954 1955	1	6610 6880	4.4	294 313	1	6750 7250	316 344	1	7652	353
25893	5 4	7	7820	5+2	409	1950 1951 1952 1953 1956	2 2 1 1 1	9815 8575 6340 8840 6730		525 458 334 472 332						
25767	,1 #	16	7740	5.1	384	1948 1949 1950 1951 1952 1953 1955	4 2 1 2 3 2 1		5.0 5.0 4.7 4.6 4.9	395 527 547 489 430 449 519						
26009	0 45	123	7784	4.6	360	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	7 12 21 23 18 17 9 7 3 2 3	8197 8778 7691 7949 8462 8343 8697 8229 9210 8270 9817 9170		370 406 360 370 390 582 597 574 421 582 443	2 4 6 7 7 8 7 5 2 3	8785 8728 9638 9043 8767 7994 7830 8390 8000 9057 8910	426 427 439 412 402 375 375 403 381 424 428	8 5 3 2 3 1	8296 8675 9084 8262 9120 9592	417 426 383 427
26188	14 1	2	8705	5.1	440	1957 1959	1	9230 8180	5.2	47 <i>1</i> 402						
26204	6 16	48	9811	4.5	438	1947 1948 1949 1950	25 6 6 4	9518 10088 10690 9303	4.6	420 456 484 421						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAUGHTER	AVERAGE	BY SI	RE		H	ECURO AVI	ERAGE E	SY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.		SOS-OAY RECORDS	MILK		YEARLY HI RECOROS NO.	MILK	
						1951 1952 1953	6ULRI 2 3 2	NSEY 10195 9523 7870		426 403 373						
2629 19	₹ 3	13	7389	4.9	359	1952 1953 1954 1955 1956 1957 1958	2 1 2 2 2 2 2 1	7470 8030 7540 8180 8050 7545 5670 7800	4.8 5.1 5.0 4.9 4.8 4.6 4.9	350 406 378 401 364 344 276 374	1 1 2 2 2 2 2 1	8340 8030 8345 8790 8480 7770 7840 7720	369 396 420	1 2 2 2 2 2 1	8578 8382 8426 7865 8382 8273 8698	
266583	3 2	3	7268	4.9	371	1952 1953 1956	1 1 1	8540 9670 5430	5.2 5.8 4.3	446 565 235	1 1 1	8350 8260 9230	396 400 43 I	1	8099	369
269662	2 10	23	7913	4.6	359	1947 1948 1949 1951 1952 1953 1954	12 3 2 1 2 1 1	8028 8113 8740 10230 8420 10520 9420 9900	4.3 4.4 4.7 4.9	352 349 379 482 418 486 433 474		8560 8870 9500	419 425 455	i 1 1	9413 8949 9178	410
2/35 (l 4	۶	7782	4.8	37 I	1950 1951 1952 1953 1955 1957	2 2 2 1 1	9045 8170 6945 7930 8540 7080	5.6 4.7 5.0 4.8 4.4 4.7	448 380 339 377 374 331	1	8770 10180	392 438	i I	85 35 9603	
27523	7 1	1	B260	4.9	402	1947	1	8260	4.9	402						
275397	7 1	2	11145	5.3	589	1952 1953	1	10280 12010		521 657	1	8620 9550		1	8818	425
275597	7 1	7	9937	5.2	515	1949 1950 1952 1953 1954 1955	1 1 1 1	9810 7740 10510 11020 10500 10870 9110	5.3 5.3 5.2 5.3 5.0 5.0	515 410 547 584 552 547 452						
∠77560	5 5	13	8075	5.5	443	1947 1948 1949 1950 1951 1952	6 2 2 1 1	7573 7705 8440 7110 10980 10520	5.0 5.3 5.3 5.8 5.6 5.0	426 407 446 409 011 583						
278098	3	5	6866	4.8	328	1947 1948 1950 1951	1 2 1 1	7690 5965 8880 9430	4.0 5.0 4.4 4.3	373 297 395 405						
279459	∂ I	5	8328	4.6	384	1952 1954 1955 1956 1957] 	9260 7700 5726 9270 9690	4.7 4.5 4.6 4.6	435 349 245 427 400	 	9350 6680 6180 7670 8620	455 316 283 359 411	1 1 1	7619 6813 7826 8099	356 307 359 377
28009		1	13050	4.3	567	1959	1	13050	4.3	567	I	9950	480	1	10115	470
280754	4 7	27	9415	4.6	427	1951 1952 1953 1954 1955 1956 1957	1 2 5 6 3 4 3 3	8860 9345 9344 9947 8077 10103 10187 10803	4.5	385 398 437 473 306 470 443 472	1 4 5 4 3 3	7760 9668 9872 10613 10398 10627 11170		3 5 3 2 2 2	9984 9154 9966 11554 11358 13064	
28 72 53	2 2	4	6494	4.4	279	1947 1948 1949	1 1 2	8470 7400 7425		350 310 322						
28731	2	1	7110	4.2	300	1952	1	7110	4.2	300						
28796	į ų	8	10224	4.6	472	1949 1950 1951 1952 1953 1955	1 1 2 1 2 1	11900 9740 11025 7920 8060 10200	4.8	549 482 322 345 372 446	1 2 1	9460 9120 9020	464 43 <i>1</i> 384	2	8818 9243	
28953	1 1	1	6450	4.5	293	1956	1	6450	4.5	293						
28953	5 2	6	9405	5+1	476	1952 1953 1954 1955 1956	1 1 2 1	10810 11330 10440 9585 7100		538 496 481 308	1 1 1 2 1	8580 10020 11020 10145 11160	437 484 537 508 519	I i 2 1	9494 9679 9799 10791	472 522
29006	9 8	45	₹900	4.7	464	1947 1948	l U 4	9512 9733	4. / 4. /	465 461						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

155

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS		TEST PCT.	FAT L8.	305-DAY (RECURDS NO.			YEARLY H RECOROS NO.	MILK	
						1949 1950 1951	GUERI 7 3 6	10761 10777 11125	4.9 4.9 4.6	525 528 513	! 1	12540 10740	628 536			
						1952 1953 1955 1956 1957 1958 1959	0 4 1 1 1	9993 8725 6890 10050 7360 11600 9560	4.6 4.7 5.2 4.7 4.0 4.9	455 403 326 522 343 553 469	1 3 1 1 1	10970 11130 8060 10040 9160 9580 10370	495 483 376 418 414 422 474	1 1	6954 6987 8753 10311 11532 11554	326 318 354 454 473 500
293364	6 5	17	9807	4.5	434	1952 1953 1954 1955 1956 1957 1958 1959	3 3 3 2 1 1	10413 10347 9610 9653 10285 8470 12470 13010	4.5 4.4 4.5 4.1 4.5 4.1 3.9	464 461 424 425 416 384 506 514	2 3 3 3 2 1	9505 0567 8183 8863 7995 8180 11200 9770	438 397 382 421 380 364 527 479	3 3 2	9258 8818 9003	430 412 405
293593	3 2	8	8198	5.0	411	1949 1950 1951 1953 1954	2 1 2 1 1	8600 8390 8255 7990 6270	5.0 4.9 5.1 5.1	429 413 418 407 279	1 1	11510 10640 9830 8680	466 452 491 450	1	9254	461
294228	3 5	11	8258	4.7	384	1955 1951 1952 1953	1 2 2 4	7810 9385 8115	4.5 4.5 4.5	353 417 383	1	9140 7230 8460	338 369	1	8044	399
						1955 1956	1	7220 7450	4.4	321 318	1	10400- 9750	482 416	1	9407 10268	417 451
296224	4 1	1	7080	4.3	306	1954	1	7080	4.3	306	1	6710	314			
298216	5 5	16	10303	4.8	482	1953 1954 1955 1956 1957 1958 1959	2 2 2 3 2 3 2	7845 7680 7850 9483 10445 12143 13580	4.5 5.5 5.4 4.7 5.1 5.0 4.3	353 425 426 449 528 584 582	1 2 2 3 2 2 1	9100 10130 10300 9770 10740 10750 9780	408 495 512 475 510 523 455	1 2 2 2 2 2 2	8938 9538 9777 8687 9347 9756 9527	432 462 488 438 455 479 463
299165	5 2	ų	6823	5.6	377	1953 1954 1958 1959	1 1 1 1	7140 6320 7170 6660	4.7 5.4 5.9 6.1	339 330 422 407	1 1 1	8/10 7920 8610 10230	419 401 407 457	1 ! !	8469 8360 9080 9527	476 415 399 431
299474	4 19	55	9477	4.7	439	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	4 7 9 5 3 6 6 3 7 2 1	10180 9096 10183 10148 9430 9992 10147 8590 9239 8665 10860 10200	4.5 4.7 4.8 4.6 4.7 4.6 4.7 4.6 4.7 4.8 5.4	451 439 477 491 431 467 469 402 404 403 585 476	1 3 2 2 1 5 4 2 7 1 1 1	10510 9633 9015 10365 9990 9233 9205 8250 9486 9480 9500 10465	463 474 445 490 503 452 433 375 435 441 454	4 1 7 1 1 2	8933 7652 8813 9897 10003 9898	421 366 477 477 475
300012	2 3	8	8601	4.9	419	1949 1950 1951 1952 1953	1 1 2 2 2	10220 12320 7695 7590 7840	4.6 4.7 5.0 5.1 5.1	472 575 383 387 391	2 2	10875 10325	433 420	2	10328	425
303185	5 1	1	7760	4.9	383	1959	1	7760	4.9	383	1	10040	491	1	9385	433
30 44 61	4 6	13	7109	5.5	386	1947 1948 1949 1950 1952	4 5 2 1	8555 6960 6440 7120 5590	5.4 5.6 5.0 5.5 5.0	462 392 366 391 279						
308118	3 6	20	8 192	4.8	389	1949 1950 1951 1952 1953 1954 1955	1 6 5 1 2 2 2	8780 7983 8200 8820 9045 8300 9195 6120	4.8 4.8 4.8 4.2 4.9 4.7 4.7	417 380 396 373 440 392 425 275	1 1 1 1 1	9100 9700 8850 8930 8640 8320	400 444 406 433 410 393	1 1 1	6191 8578 8153	410 408 395
308548	В 1	3	16220	4.5	721	1953 1955 1956	1	15870 16230 16560	4.4	694 761 708	1 1	12670 12960 14570	588 617 670	1 1 1	11336 13254 13941	5.73 631 643
30969	1 1	2	10205	4.5	461	1950 1952	1	10230 10180	4.5	461						
509779	9 22	69	8826	4.7	418	1951 1952 1953	6 12 12	7647 8448 9042	4. (5. 0 4. 7	359 415 437	4 9 11	9/00 9483 9052	459 435 423	10	9527	459

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY ERECO,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAK	RECORDS NO.		TEST PCI.	FAT LO.	SOS-DAY RECUROS			YEARLY HA		
						1954 1955 1956 1957 1958 1959	3UER: 9 5 4 8 4	9726 9844 10016 9303 10104 10015	5.0 4.6 5.0 5.0 5.0 4.6	482 467 464 453 503 459 506	8 7 9 4 7 4	9391 10481 9900 10213 9949 9578 9870	451 486 476 474 486 459 488	8 7 5 4 6 4	9442 9916 10156 9906 10172 9916	460 468 479 466 491 434
31296	0 1	2	7470	4.8	359	1959	2	7470	4.8	359	1	10560	513	1	12546	619
316996	6 88	186	8502	4.7	391	1954 1955 1956 1957 1958 1959 1960	13 49 44 35 23 18 5	8548 8487 8429 8941 8712 8990 9112	4.8 4.7 4.6 4.7 4.6 4.6 4.7	409 398 385 420 417 415 428	12 45 39 31 17 15	8648 9216 9882 10628 10717 10167 9094	403 413 429 460 478 468 444	12 43 30 30 12 14	8548 9022 9103 9800 10351 10093 9491	407 404 409 426 457 465 434
31790	8 2	3	7510	5.1	378	1950 1951	1 2	8180 7390	4.6 5.0	3/9 370						
31802	6 I	1	7520	4.8	362	1955	1	7520	4.0	362	1	8090	424	1	9657	485
31842	5 134	310	8072	4.7	374	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 37 17 30 57 51 46 44 20 14 8	10630 9270 8923 8289 8192 8140 8243 8100 8126 8473 9640 9910 8832 9160	5.0 4.5 4.6 4.6 4.6 4.6 4.5 4.6 4.5 4.6	528 419 426 378 333 375 332 379 372 391 426 441 410 384	1 3 14 28 40 44 42 19 14 6 5	8080 6543 8673 8671 8566 9239 9202 9104 9343 9328 10390	396 356 396 367 389 388 414 415 417 464 443	34 39 40 14 13 5	0478 8651 8825 8640 9353 10244 9716 12971	392 383 398 406 424 464 456 566
31842	9 1	4	10215	5.3	539	1956 1957 1958 1959	1 1 1	6830 9980 11040 13010	5.4 5.3 5.3 5.1	369 529 388 668	1 1 1	10750 12670 12330 11480	530 638 649 593	1 1 1 1	11957 11260 11827 11903	588 556 602 607
3 1963	8 2	9	7447	ħ° Ħ	327	1950 1951 1952 1954 1955	1 1 3 2 1	7540 7710 7593 7440 6730 7910	4.9 4.2 4.5 4.5 4.4	371 326 347 334 295 334	2 2 1	7900 8120 8850 7290	386 379 386 329	2	7652 7685 7892	366 362 364
32146	2 1	2	9310	5.4	501	1958 1959	1	9750 8870	5.6 5.2	543 459	1	8770 9210	467 461	1	8753	439
32229	5 1	3	9490	4.4	412	1952 1953 1954	1 1 1	9180 11120 8170	4.3 4.3 4.5	391 477 369	1 1 1	9380 9560 9480	461 470 464	1	9505 9330	470 463
32260	0 1	6	7562	4.9	370	1951 1952 1953 1954 1955 1950	1 1 1 1 1	7980 7400 7200 6626 8200 7970	5.1 4.9 5.0 4.8 5.0 4.6	406 361 361 315 411 367						
32436	1 1	2	8790	4.1	360	1956 1957	1 1	8710 8870	4.1 4.1	355 364	1	80 ≠0 7840	378 360			
33120	4 2	5	8163	5.1	410	1955 1956 1957 1958	1 1 1 2		5.3 5.1	390	1 1 1 2	10380 9450 10250 10710	520 455 512 522	1 1 1 2	9777 8687 9538 11543	438
33281	9 14	15	9071	4.8	441	1958 1959	6	8453 9499	5.1 4.8	425 467	5	9334 10164	448 458	ų 8	9309 10758	447 468
33344	2 1	1	5380	5.2	280	1952	1	5380	5.2	280						
33573	6 4	10	9 3 2 8	4.5	412	1952 1953 1954 1955 1956	1 3 2 3 1	11040 10100 9235 9840 10820	4.5 4.7 4.3	504 450 432 421 466	1 3 2 3 1	9930 8950 10020 10077 10620	479 433 474 487 527	2 2 3 1	8873 9549 9360 11957	467
33653		1	7960	5.4	434	1952	1	7960	5.4	434						
33699	0 1	2	8450	5.3	444	1950 1951	1	7150 9750		401 486						
33729	4 28	90	8576	4.8	407	1950 1951 1952 1953 1954	14 12 15 19 13	8845	4.9 4.8 4.7 4.7		2 6 10 16	10395 9497 8607 9646 8786	506 432 404 430 417	15 11	88 7 9 9177	

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	BY SIE	RE		B	ECORD AV	ERAGE (BY SIR	€ BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS No.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	KECORDS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.			YEARLY HE RECORDS NO.		
						1955 1956 1957 1958 1959	GULR 10 8 4 3 2	9414 9171 9585 11800 11085	4.6 4.6 4.7	444 411 440 547 470	8 7 3 2 2	10254 9831 10350 11205 9955	465 457 498 544 454	7 7 3 2 2	8787 8879 9236 9173 9968	411 431 449 495 455
338035	ı	2	7735	4.B	361	1953 1954	1	7000 8470		353 380	1	9330 9560	444 428	1 1	9766 10072	445 455
338561	1	1	8610	4.4	379	1951	1	8610	4.4	379						
340093	12	2В	8570	4.3	372	1948 1949 1950 1951 1952 1953 1954	1 6 3 6 5 2	7620 8580 8605 9360 8343 8714 8910 9990	4.1 4.3 4.4 4.4 4.2	311 352 378 400 365 389 378 383	1 2 2 3 5 2	12720 10000 11220 8063 9730 11060	458 403 453 363 391 375	5 2 1	905B 10568 10093	374 395 370
340243	1	Ħ	10853	4.8	518	1955 1956 1957 1958	1 1 1	11530 11560 8410 11910	4.9 4.5	529 567 400 576	1 1 1	8470 9080 10800 11740	404 453 446 547	i 1 1 1	8360 8077 8905 8426	396 387 396 495
340570	1	4	9923	5.1	503	1954 1955 1956 1957	1 1 1 1	10750 9510 11110 8320	5.0	561 480 534 436	1 1 1	10010 9320 10540 10060	507 449 503 522	1 1 1 1	10157 9854 10061 9570	520 500 491 466
342718	2	3	8000	4.9	3B9	1953 1955	2 1	7660 8990		359 498	1	12070 9660	419 413	1	B829	3/4 387
342719	113	210	7929	4.7	373	1952 1953 1954 1955 1956 1957 1958 1959	1 24 43 50 37 23 17 14	7600 8144 7675 7803 7999 8950 9653 8581 9290	4.7 4.8 4.7 4.6 4.5 4.7	329 383 359 370 374 406 434 462 398	20 39 50 30 22 13 13	9012 9040 9067 9353 10117 10179 9298 8600	396 402 420 423 444 463 445 445	19 36 46 31 22 11	9664 9156 8966 9191 9508 9956 9429	422 410 413 418 421 451 450 448
344<04	23	53	8076	4.4	355	1952 1953 1954 1955 1956 1957	6 15 10 10 7 4	8117 7952 8267 7931 8221 8615 5730	4.5 4.5 4.5	370 350 363 361 352 389 228	3 12 9 7 4	3500 3279 8613 8657 8626 9515 8960	408 413 396 401 400 434 329	11 8 9 6 4	8846 8551 8741 9441 9143 8110	414 401 389 420 421 303
352492	2	8	10516	ц.ц	453	1951 1952 1953 1954 1955	1 1 2 2 1	12550 10280 10810 10300 8840 7750	4.5 4.4 4.4 4.3	492 458 466 453 333 378	1 1 2 2 1	9260 8410 10150 10140 9610 9590	423 388 422 456 442 428	2 2 1	9766 10072 9734 9745	445 455 429 444
353206	6	20	8500	5.0	425	1950 1951 1952 1953 1954 1955 1956 1957	1 6 2 3 1 3 2	9440 8680 8073 8970 9750 10390 10520 9505 9880	4.9 5.0 4.7 5.0 5.1 4.7	557 422 402 421 486 533 499 427 417	5 2 3 1 3 2	9608 10860 11637 10810 11040 10620 9860	491 522 538 526 525 510 470	2 3 1 3 2	9494 9679 10998 10791 9886 9734	463 472 537 517 467 469
354224	1	5	8680	4.4	377	1955 1956 1957 1959 1960	1 1 1 1	8850 9660	4.5 4.5 4.0 4.2	395 384 411 396	1	5970 8130 8420 10190	272 371 422 483	1 1 1 1	6813 7826 8099 8655 9069	359 377 411
357/49	1	4	9548	4.6	440	1952 1953 1954 1955	1 1 1 1	10340 10290 8380 9160	4.7	495 479 373 413	1 1 1	8830 9580 9950 8990	416 434 464 427	1 1 1	8426 9756 10301	445
359070	2	7	10387	4.8	497	1950 1952 1953 1954 1955	2 1 1 1 1	9580 10490 12690 12220 11200 12130	4.9 4.9 4.0	451 515 623 595 541 565	 	10080 9270 10440 12550 14020	435 512 558	1	11336 13254 13941	
35 98 22	22	86	9300	4.7	437	1948 1949 1950 1951 1952 1953 1954	10 10 12 11 7	9134	4.7 5.0 4.7	414 442 473 467 435	10 8 8 6	8530 9460 10640 9382 9313 9466 9337 10039	456 523 453 443 455 446	7 5 6	9264 9616 9805	462

TABLE IS.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.	L8.	TEST PCT.		305-0AY (RECORDS NO.			YEARLY HE RECUROS NO.		FAT
						1956 1957 1958 1959	GUER/ 6 3 2 1	10502 11387 11315 11790		498 545 506 508	5 3 2 1	9940 9490 10995 8730	492 466 531 477	5 3 2 1	9860 9734 10045 9810	482 469 495 492
36036	9 3	5	7781	4.9	384	1951 1954 1956 1957	2 1 1 1	8025 7210 7210 7460	5.0 4.6 5.1 4.8	397 343 368 360						
36149	3 2	ł,	8409	4.2	349	1955 1956 1957 1960	1 1 1	7920 8560 9010 8320	4.6 4.3 4.1 4.0	364 366 372 330		8840 8170 8850 11460	431 414 441 421	1 1 1	8491 8426 8557	422 417 417
36246	9 3	13	7143	4.5	321	1952 1953 1954 1955 1957 1958	2 2 3 3 2 1	8135 5755 7967 7930 6365 7920	4.8 4.6 4.5 4.3 4.3	384 263 358 337 275 340	2 2 2 3 2	8835 8550 8365 8923 9310	411 391 383 413 419	2 2 3 2	8240 7837 8251 8644	392 371 382 395
36∠59	5 1	1	4630	4.5	208	1955	1	4630	4.5	208	1	9410	362	1	7586	349
36534)	1	4900	5.1	248	1950	1	4900	5.1	248						
36578	3 137	212	8183	4.9	403	1951 1952 1953 1954 1955 1956 1957 1958 1959	12 13 34 48 48 36 36 23 17	8223 7568 7773 7977 8464 8525 9087 9013 8399 9094		399 362 381 398 415 423 460 433 427 443	4 6 27 46 47 35 35 19 17	9090 8498 8550 8892 9269 9723 10545 10672 9221 8828	375 377 388 403 423 436 478 483 436 426	23 39 45 28 33 16 13	8964 8840 8999 9466 9855 10764 9618 8895	408 402 407 431 448 481 456 424
36687	5 2	6	7114	4.9	34/	1955 1956 1957 1958 1959	1 2 1 1	6600 7145 7920 6930 6680	5.3 5.0 5.4 5.3 5.1	351 355 426 365 338	1 2 1 1	9120 8930 9770 7830 7680	453 426 458 360 371	1 1 1 1	8785 8676 8230 9439 7826	437 417 405 451 375
36727	1 1	1	7370	4.3	315	1953	1	7370	4.3	315						
36859	7 10	23	8394	4.8	406	1948 1949 1950 1951 1952 1953 1954 1955	1 4 3 6 3 3 1 1	9230 10328 7717 7322 8163 9120 13350 14790 12600	5.1 4.9 4.7 4.8 4.7 5.1 4.9 4.9	472 510 366 355 384 467 054 726 626	1 1 1	8240 8520 9290 10450 10140	427 460 566 612 611	1 1	11238 10355 11020	615 590 591
3738∠	3 43	79	8 364	4.5	378	1954 1955 1956 1957 1958 1959 1960	12 23 17 13 9 4	8183 8485 8446 9676 9130 7605 5590	4.5 4.5 4.4 4.5	363 384 385 437 398 339 258	11 22 15 12 8 4	9075 9265 9999 10415 10003 9828 11050	408 421 423 465 460 410 408	7 23 14 10 5 4	9226 9191 9248 10550 9782 10129 9854	411 412 410 454 452 446 384
37408	6 20	52	7104	4.7	328	1949 1950 1951 1952 1953 1954 1955 1956	2 4 8 9 10 11 3 4	3865 7193 6966 8206 6952 7487 6760 7708 6530	4.6	180 342 331 381 324 337 308 327 298	3 4 3 4 1	7213 8648 8377 7765 8027 8380 7960	365 421 375 363 361 375 364	3 4 3 4	7074 7445 7423 7390 6987	337 340 338 326 310
37438	3 28	67	8507	4.6	390	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 8 19 14 8 7 4 2 1	7395 9529 7892 8859 8449 9866 8733 7740 9790 10310 11790	4.8 4.7 4.6 4.6 4.5 4.6 4.7 5.0 4.8 4.3	357 440 364 411 397 448 402 361 487 494 508	5 7 6 4 2 1 1	8878 9314 8262 9257 10153 10225 12610 13070 9510	395 410 382 426 474 439 553 481 460	5 6 4 · 2 1 1	835 1 929 1 9328 9990 11009 11936 9723	409 426 426 446 448 483
37794	5 I	ц	7000	4.7	330	1952 1953 1954 1955	1 1 1	6120 7870 7260 6750	4.7 4.8 4.8	290 377 348 305	1 1 1	7320 8270 7330 8880	334 381 365 415	1	8524 7379	403 356
37898	0 1	2	7795	5.0	387	1951 1952	1	7260 8330	5.1 4.9	367 406						
38017	8 1	2	10400	4.8	496	1955 1956	1	10770		526 465	ì 1	10680 12270	494 622	1	13254 13941	

FABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

					RDS FR		STATE ON									
	OAUGHTER	AVERAGE	8A ?1	RE		R	ECORO AV	CRAGE E	BY SIR	E BY	FRESHENING					
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	RECURUS NO.			YEARLY H RECORUS NO.		FAI LB.
							GUER	NSEY								
382002	69	175	8582	4.9	416	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 16 31 41 39 17 16 8 3	10500 8579 8352 8662 8785 8291 9078 9438 8420 7810	4.9 4.8 4.9 4.7 4.5 4.5	510 424 409 417 427 405 430 425 588 529	1 11 25 39 39 16 16 8 3	9050 8977 8977 8611 9310 9129 9398 9718 8043 7740	460 414 405 398 432 427 428 447 389 383	23 37 37 15 15 8 2 2	9132 8698 8777 8642 9146 10182 8606 1990	419 406 410 411 418 464 405 371
383793	154	276	8513	5.0	421	1953 1954 1955 1956 1957 1958 1959 1960	1 41 68 58 35 43 26	5580 8507 8418 8419 8719 8568 8917 8318	5.9 4.9 5.1 4.9 5.0 5.0 4.9	327 422 427 412 434 430 436 388	1 40 66 56 34 37 26	5310 9284 9254 9721 10091 9936 9279 8988	269 415 418 435 461 443 425 402	1 36 60 47 33 31 24 2	6159 9151 9109 9447 9635 9667 9887 7995	300 412 407 426 438 438 450 359
388586	1	1	15390	5.5	850	1953	1	15390	5.5	850						
390189		1	8030	5.0	401	1951	1	8030	5.0	401						
390340		1	12990	5.4	696	1958	1	12990	5 • 4	696						
394541	2	2	7350	5.0	367	1951 1959	! 1	7560 7140	4.0 5.2	359 374	1	10190	485	1	9745	452
397654	ı	1	7570	4.5	339	1955	1	7570	4.5	339	1	11550	485	1	10420	436
401324	1	1	9020	4.3	388	1955	1	9020	4.3	388	ì	9000	428	1	10301	468
401818	6	18	8925	5+0	445	1952 1953 1954 1955 1956 1957	1 4 2 2 6 1 2	8800 7968 8175 9885 9317 8660 10125	5.0 5.3 5.0 5.4 5.0 4.7 4.4	437 417 403 540 469 410 441	1 2 2 6 1 2	8330 9050 10675 10960 10792 8620 11205	396 429 471 514 470 370 453	4 2 2 4 1 2	8810 9919 10819 9944 9701 11059	403 434 492 462 410 460
402236	56	138	7619	4.7	360	1950 1951 1952 1953 1954 1955 1956 1957	4 14 25 31 24 20 12 6 2	8950 8148 7296 7442 8012 7943 8478 9287 5425	4.9 4.7 4.7 4.8 4.8 4.8 4.9 4.8	432 364 340 355 384 387 402 429 250	1 5 16 23 23 19 12 5 2	10060 9108 8853 8550 8572 9106 9198 9290 7060	444 414 402 383 408 423 426 419 310	24 23 19 12 5	8433 8777 8647 8922 9263 7009	394 416 402 422 424 338
403768	1	1	9860	4.6	455	1953	1	9860	4.6	455	1	9890	481			
404434	70	138	7980	4.7	374	1952 1953 1954 1955 1956 1957 1958 1959	18 23 26 16 24 13 13	7369 8047 8469 7924 7926 8536 7995 9670	4.9 4.7 4.6 4.7 4.6 4.5 4.5	358 379 387 370 364 383 365 433	10 19 23 15 23 11 10	9009 9338 8939 9613 9337 9740 9552 10538	415 404 409 430 409 424 413 429	18 22 15 19 11 9	9027 8929 8792 9094 9672 9258 10143	408 410 336 406 424 402 418
407865	1	1	9150	5.0	458	1954	1	9150	5.0	458	1	10360	519	1	10159	520
413425	3	6	10490	4.9	518	1955 1956 1957 1958	1 2 2 1	9490 11620 8760 8540	5.0 5.0 4.8	460 576 435 406	1 2 2 1	11360 9520 11360 9710	472 451 478 407	1 2 2 1	10420 8541 12819 11510	436 412 533 471
417939	50	109	8266	4.5	371	1953 1954 1955 1956 1957 1958 1959	12 35 23 9 13 10 7	8857 7820 8109 8438 8682 9101	4.5 4.6 4.5 4.4 4.5 4.4	385 353 367 380 391 410 461	12 30 22 9 13 10 7	8995 8792 8964 9411 9822 9773 9713	394 393 397 401 416 451 439	12 27 18 7 12 9	9064 8951 8813 8908 9693 9722 10263	398 399 397 404 408 438 461
418803	46	49	8763	4.9	428	1957 1958 1959 1960	11 10 20 8	8416 9356 9248 7631	4.9 4.7 5.0 4.9	406 442 460 369	6 7 20 8	11258 10797 10825 9793	522 445 487 431	6 7 20 4	11047 11380 11107 10238	498 484 488 451
419988	1	1	7530	5.4	405	1959	1	7530	5 - 4	405	1	10450	431	ŀ	10769	465
4268Z0	2	2	8170	4.9	389	1959 1960	1	9500 6840	4.4 5.3	417 360	i 1	11570 11570	473 473	1 1	12186 12328	487 492

431323 3 9 11521 5.0 580 1957 2 12025 4.9 581 1 10920 530 1 11260 556

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING DRGANIZATIONS--GROUPED BY BREED,
8Y YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

STRE	DAUGHTERS	RECUROS	MILK	TEST	FAT	FKESH	RECORDS	MILK	TEST	FAT	305-DAY (YLARLY H		
NO.	NO.	NO.		PCT.	LB.	YEAR	NO.		PCT.	L8.	NO.	LB.	LB.	NO.	LB.	Lc.
							uUERI	NSEY								
						1958	4	11885	5.0	596	2	11090	55 I	1	11827	602
						1959	3	10700	5.2	559	2	10960	546	1	11903	607
43852	6 1	2	5935	4.8	282	1955	1	6150	4.7	291	1	8930	415	1	7379	356
						1956	1	5720	4.8	273	1	8190	390	1	7750	365
440580	0 1	1	6250	5.4	338	1955	1	6250	5.4	338	1	7720	384	1	8328	393
440968	8 1	5	8178	4.4	355	1953	1	8060	4.4	351	1	/800	345	1	8916	455
						1954 1955	1	6980 8080	4.4	306 344	1	7920 7470	343 325	1	7619 6813	356 307
						1957	i	8410	4.2	357	- 1	8870	433	i	8099	377
						1958	i	9360	4.5	418	i	9650	457	i	8393	402
44 185	1 1	3	11277	4.9	550	1957	1	14130	4.9	689	1	12000	607	1	11260	556
						1958	1	11510	5.1	585	1	12320	649	1	11827	602
						1959	1	8190	4.6	376	1	12320	638	1	11903	607
443141	4 1	2	10160	4.9	494	1954	1	10930	4.6	499						
						1955	1	9390	5.2	488						
444155	5 18	20	7261	4.8	348	1955	1	7610	5.4	411	1	8600	409	1	8567	387
						1956	1	6224	5.0	312	5	10708	415	5	10813	430
						1957	7	6897	4.6	313	6	11590	460	6	11750	475
						1958	2	9510	4.5	430	2	13580	519	2	11887	405
						1959	3	8193	4.0	398	3	10327	443	3	974R	403
1414141	7 2	2	9590	4.5	425	1959	2	9590	4.5	425	۷	8210	362	2	9859	422
44580	4 8	8	9001	4.6	417	1957	1	8260	4.7	391	1	12660	616	1	10213	444
						1958 1959	1 4	7120 8935	4.8	340 406	4	11353	457	LL .	11407	472
						1960	2	10445	4.7	491	2	7995	406	•	11401	412
45605	4 20	39	8950	4.7	424	1955	11	8473	4.8	406	- 11	8989	425	9	8589	386
						1956	9	8663	4.0	395	7	9131	404	5	8356	371
						1957	7	8644	4.6	399	6	8938	413	4	9483	426
						1958 1959	8 4	10550 10775	4.8 5.1	501 539	7 4	8936 10640	421 489	6	8776 10701	411 495
45948	9 1	1	7470	4.7	349	1959	1	7470	4.7	349	1	10720	415	1	12154	482
46005	7 1	3	8513	5.2	439	1954	1	9570	5.1	485						
						1955	1	7410	5.4	403						
						1956	1	8560	5.0	428						
47814	2 1	1	7130	5.3	375	1959	1	7130	5.3	375	1	10680	424	1	12328	492
48186	1 1	1	9130	4.0	369	1960	1	9130	4.0	369	1	10150	415	1	11053	456
49314	6 7	7	7510	4.8	362	1957	2	8380	4.8	398	2	12065	510	2	10753	439
						1958	1	7310		351	1	12820	465	1	12306	447
						1959	2	7635	5.0	378	2	10420	437	2	10175	446
						1960	2	6615	4.7	315	2	9480	4 30	2	6409	313
50494	6 1	1	9780	4.9	483	1960	1	9780	4.9	433	1	10780	521			
50597	0 13	13	10012	4.4	442	1957	1	12410		497						
						1958	4	8960		404	2	10275	402	1	8110	303
						1959	6	9833		429	6	10602	433	6	11076	403
						1960	2	11455	4.7	531	2	10500	455	1	13429	520
51028	9 1	1	7950	4.9	388	1959	1	7950	4.9	388	1	10680	412	1	12230	481
51860	4 2	2	8890	4.4	392	1959	2	8890	4.4	392	2	12570	519	2	11848	464

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREZOING ORGANIZATIONS--GROUPED BY ORGEL,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RELOROS NO.		TEST PCT.			RLCORDS NO.	LB.	TEST PCT.		305-DAY RECORDS NO.		FAI	YEARLY HI RECOKOS NO.		FAT
633/6	1 19	50	10670	3.6	383	1947 1948 1949 1950	31	10814 11527 12686 12040	3.6	382 415 476 426						
673409	7 14	42	11663	3.5	409	1947 1948 1949 1950 1951 1952 1954 1955	11 12 9 5 1 2	11445 11357 13511 12996 7380 10605 10350 10190	3.5 3.7 3.4 3.3 3.7	394 402 478 471 249 348 380 431	1 1 1 1	81y0 11630 11360 11200 11590			16355 10726	
68350	9 11	25	9506	3.6	337	1947 1948 1949 1950	20 3 1 1	9638 9240 10190 8470	3.7	346 327 377 291						
684989	, ,	30	10172	3.6	365	1947 1948 1949 1950 1951 1952 1953 1954 1955	16 4 2 2 1 2 1	10488 11598 10475 12335 10590 12445 12100 11910	3.5 3.8 3.8 3.3 3.7	379 408 340 461 402 420 448 420 374	1	8510 10460 10570	360 382 375		9211 9854	
68499	1 12	37	12039	3.6	436	1947 1948 1949 1950 1951 1952 1953 1954	11 / 5 6 3 1 3	11365 12194 13564 13103 15600 17780 13413 15140	3.5 3.7 3.7 3.7 4.1 3.6 3.9	400 447 499 493 636 648 519 576	1 1 1	10940 11340 11690	408 422 437 408		10061	
69848	3 1	7	13070	3.3	437	1948 1949 1950 1951 1952 1953	1 1 1 1 1 1	11440 11760 13750 15250 12920 13700 12670	3.4 3.3 3.3 3.2	381 434 466 503 424 437 411	1 1 1 1	13550 12110 13010 12680 12710	484		10453 12132	
698490) 14	29	9532	3.7	353	1947 1948 1949 1950 1951 1952 1953	17 2 2 1 2 3 2	10228 7300 10330 10660 10335 9203 13535	3.7 3.5 4.0 3.6 3.4	387 269 354 424 371 320 475	2 1 1 2 2 1	13360 13760 12680 12595 12080 11500	465 447 440	ı	12633	435
70084	1 7	14	10262	3.5	361	1947 1948 1949 1950 1951 1952 1955	4 1 3 1 2 2 1	9033 13660 9967 8770 12190 10980 10240	3.5 3.4 3.5 3.2	529 448 348 295 428 355 331	 	5000 69a0 10140		1	9690	36.3
704282	2 52	107	12064	3-6	431	1947 1948 1949 1950 1951 1952 1953 1954 1955 1957 1958	14 13	11074 11166 12658 12626 12769 12568 12193 11573 12640 13910 15230 15320	3.7 3.6 3.7 3.7 3.5 3.4 3.5 3.6 3.4	391 409 448 463 471 439 420 397 453 469 532 499	2 7 7 7 8 8 8 4 6 2 1	10975 12450 11346 11939 12240 12770 12760 12060 12497 13145 11800 11900	409 438 447 466 477 457 466 501 472	7 4 6 2 1	12434 12472 11746 12399 12437 9352	462 439 470 501
70534.			14370			1948	2	14370		471						
71068	1 4	10	11616	3.8	443	1947 1948 1949 1950	7 1 1 1	11063 10910 11230 10910	4.U 4.0							
71401	5 10	30	9451	3.6	335	1947 1948 1949 1950 1951 1952 1953	19 3 2 1 2 2	9258 12580 12080 12610 14440 13710 14140	3.7 3.5 3.4 3.5 3.4	435 502		9460 10190 11620 12220 11270 11110	393 403 425 385	1	10856	385
71553	2 64	235	11162	3.7	407	1947 1948	106 34	10B04 11288		397 417	8 /	13070 11621				

TABLE 15.---OAUGHTEK-AZERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NU.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	FRESH YLAR	RLCORUS NO.		TEST PCT.		305-0AY (RECORDS	MILK		YEARLY HI RECUROS 40.		FAT
						1949 1950 1951 1952 1953 1954 1955	18	IEIN I2626 11974 12774 12476 11836 12897 12237	3.7 3.8 3.7 3.7 3.1 3.3 3.6	468 453 469 456 436 429 439	7 6 7 8 9 2 3	13096 12510 13057 12469 12063 10955 11140	483 478 479 461 440 400 415	9 2 3	12105 10955 11456	447 399 423
71576	1 8	18	884/	3.4	301	1947 1948 1949 1950 1951	11 2 2 1 2	8751 10050 10910 10750 12650	3.3 3.6 3.5 3.7 3.4	290 364 380 397 430						
716598	3 1	3	10380	3.3	348	1947 1949 1950]]]	8500 10680 11960	3.5 3.2 3.5	284 346 415						
718649	9 I	3	12360	3.4	417	1947	3	12360	3.4	417						
719452	2 1	2	12895	3.5	449	1951 1952	1	11410 14380		385 513						
122270	6 6	25	12098	3.5	419	1947 1948 1949 1950 1951 1952	10 5 5 1 2 2	11210 12298 14098 13040 12800 10510	3.6 3.5 3.4 3.2 3.6 3.4	392 430 481 418 456 358						
722342	2 1	3	13317	3.5	469	1951 1952 1953	1 1 1	14670 12440 12840	3.6 3.5 3.4	526 441 439	1	13230 10940	480 389	1	10878	305
72760	9 1	1	14820	3.8	565	1949	1	14020	3.≀	565						
730516	5 12	25	12003	3.7	44/	1952 1955 1954 1955 1956 1957	6 2 5 4 4	10407 12185 9406 10940 12288 15150	3.6 3.7 3.7 3.7 4.2	398 448 347 411 475 635	4 2 5 4 4 1	12463 13660 10562 11940 13540 15290	438 465 398 439 517 582	24 14 24 1	11502 11462 12524 13908	414 419 471 555
						1958 1959	1 2	17180 17020	3.5	722 591	1 2	15380 12255	630 459	1	15587 12263	608 446
73398	2 2	3	12608	3.4	432	1947	3	13147	3.5	457						
73791	5 l	3	9773	٥.5	339	1953 1954 1955	1 1 1	10220 10770 8330	3.4	358 364 2 7 5	1 1 1	8690 11210 9350	301 377 334	1 1	8796 10802 9647	307 355 341
73885	1 1	6	15/05	3.7	5//	1952 1953 1955 1957 1958 1959	1 1 1 1 1	13260 12770 15900 14760 16290 21250	3.8	479 492 598 520 577 797	 	14/30 13680 13870 13410 14990 15250	528 475 526 493 568 579	1 1 1	12459 14037 16001	463 512 610
74 /24	2 2	5	14062	3.4	468	1951 1952 1953 1954	1 2 1 1	13990 14650 12690 13580	3.2 3.3 3.3 3.4	452 483 424 459	1 1 1	13410 13420 12940 12730	537 519 512 502	1	12590 13396	
74643	9 1	1	10870	3.5	377	1947	1	10890	3.5	377						
/4881		1	9200	4.3	399	1952	1	9200		399						
75387	6 9	24	10523	3.3	349	1947 1948 1949	20 3 I	10303 12960 10330		337 445 350						
75510	1 1	6	10147	3.7	372	1950 1951 1952 1953 1954 1955	 	10156 8810 9210 10000 10470 12240	3.7 3.5 3.8	398 328 323 383 347 455	 	12900 13730 13950 13050 12900 14080	470 519 534 514 508 573	I 1 1	12590 13376 14334	
75565	9 I	łą	10900	3.9	422	1947 1948 1949	2 1 1	10/05 8990 13520	4.0 3.5 4.0	419 312 539						
/5583	4 37	124	10668	3.6	386	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	11 10 16 19 13 17 12 9 8 4	11314 9427 10856 10657 11376 11378 10659 12125 12306 12760	3.6 3.6 3.6 3.6 3.5 3.4	430 342 390 389 411 412 412 390 425 418 461	2 3 5 7 6 12 10 7 7 5	12925 12007 12434 12876 10717 10375 10336 10326 11049 11210 10830	456 450 449 473 414 411 395 379 416 404 370	10 9 7 3 2	10015 10130 10399 9741 10650	385 369 374 357 362

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

163

					KUS FR		STATE ON		D.W	c ,,,,,	CO. C. 17	W. 411				
	DAUGHTER	AVERAGE	B1 21	KE		к	ELOKU AV	ERAGE I	BA 21K	E BY	FRESHENING		AV	YLAKLY H	EDA AVE	HACE
SIRE NO.	OAUGHTERS NO.	RECUROS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.	LB.	TEST PCT.		RECORDS			RECOROS NO.		
						1958	HOLS 2	TE IN 17990	3.6	633	1	15570	529	1	15816	570
75 65 5.	2 60	168	10843	3.6	381	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	12 27	10016 10219 11102 111064 111068 111160 11114 11098 11057 10312 9393 10710	3.5 3.7 3.6 3.5 3.7 3.7 3.6 3.6 3.6	365 363 393 409 397 395 409 405 404 379 354 436	3 7 5 12 11 11 8	13030 12783 11630 11909 10980 11663 11730 11017 10536 11275 11313 12560	488 466 436 442 414 418 429 396 384 411 417	1 1 1 1 8 4 3	10990 11127 11181 10927 11692 12252	408 404 405 407 434 462
75419.	3 64	200	12853	3.5	445	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	6 14 32 39 30 29 18 12 9 7 3	11912 11954 13122 13060 12997 13427 13755 14015 13664 13279 15757	3.5 3.5 3.5 3.5	404 413 455 460 460 455 470 472 458 564 440	10 13 14 16 15	13130 12065 12041 12757 11684 12559 11980 11134 12170 14425	480 437 437 467 419 449 440 400 446 542	10 7 5	11564 11691 10875 11489 12644	
16067	9 1	5	10226	3.4	350	1949 1950 1952 1953 1954	1 1 1 1	9590 8930 10680 11120 10810	3.6 3.2 3.4 3.5 3.4	343 288 365 385 371	1	9780 11260 9980 11590 13130	343 386 359 425 485		11303 11968	
76197	7 8	41	14360	3.6	508	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 3 7 5 6 5 6 4 2	10275 14997 15251 15274 12400 13856 14288 13198 12195 13140	3.6 3.4 3.6 3.6 3.7 3.5 3.5 3.5	373 508 547 532 444 504 496 464 429 455	2 3 6 5 6 5 6 4 2 1	15800 13400 14905 15166 13532 13192 14340 13388 12525 11640	522 477 518 533 484 474 489 480 446	2 3 4 3 3 2 1	11881 10457 13056 11866 12909 12197 11892	435 382 475 431 466 439 446
76294:	5 33	96	12045	3.5	422	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 12 20 14 10 14 8 6 3 3 1	10903 10388 13110 13610 12329 12572 11390 12757 13003 13767 11050 13480 10810	3.7 3.6 3.6 3.6	386 379 467 485 439 443 385 444 427 469 412 486 390	1 22 5 5 4 6 7 5 3 3	11970 11575 11562 10662 11935 11350 10859 11340 11010 11967 11540	419 446 413 393 408 406 401 432 402 432 447	6 5 3 3 1	10103 10806 10417 10893 11020	362 402 376 402 409
76537	9 1	1	12950	3.7	480	1947	1	12950	3.7	480						
76606	5 3	9	10887	3.6	385	1950 1951 1952 1953 1954 1955 1957	1 2 1 1 1	12660 12650 11420 13690 8550			1 1 1	11690 12240 13570 10920 11890		1	12437	447
76846	0 2	7	12307	3.9	457	1952 1953 1955 1956 1957 1958	1 1 1 1 2	14890 16250 16020 15650 17410 10805	3.2 3.2	509 582 510 507 592 415	1	9830	344	1	10824	389
76886	6 1	ц	15815	3.6	561	1952 1953 1954 1957	1 1 1 1	15880 16490 15720 15170	3.5 5.4 3.7 3.6	550 560 584 551	1 1 1	14930 15400 14660 16470	543 559 527 590	1	14889	538
77160	2 1	ц	13338	3.3	430	1950 1951 1952 1953	1 1 1 1	9800 7520 16970 19060	3.2	323 245 544 607	1 1 1 1	15670 17500 18300 18450	512 566 597 593			
77717	7 2	ц	10892	3.5	378	1951 1953 1954 1960	1 1 1 1	8090 7400 6390 14490	3.6	272 261 231 500	1 1 1	12740 11340 11890 13460	465 405 432 459		12633 11042	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	DAUGHTER	AVERAGE	D1 71	(L		K	ECORD AV	LRAGE	31 21/		LKE SUCIALIAO					
SIKE • 0N	DAUGHTERS NO.		MILK LB.				RECUROS NO.			FAT LB.	305-BAY (RECORDS NO.	CONTEMP MILK L3.	FAT Ld.	YLARLY H	RU AVL MILK LB.	FAT LC.
							H0F?									
77749	5 45	159	12026	3.6	435	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	44 18 17 18 19 17 10 9 4 2	12812 12821 12616 12780 12406 11311 11988 13268 11963 7380 9480	3.6	470 482 460 466 453 409 440 466 434 272 342	4 4 5 8 9 8	12420 12696 12649 12223 11656 12604	405 443 451 457 445 429	8	11403 12207 10816 9135	44.7 405
77870	0 1	f†	22465	2.9	65/	1952 1953 1954 1955	1	21440 23630 23600 21190	3.0 3.0	611 700 709 608)) 	17600 17040 18150 18400	537 600	1	18268	635
78045	6 2	7	13134	3.7	482	1954 1955 1956 1957 1958 1959	1 2 1 1 1	14390 15585 9170 10530 12080 7950	3.9 4.0 3.8 3.9	598 367 396 474 258		11200 11080	462 482 450	1 2 1 1 1	12066 11325 10104 10791 11456 10584	436 403 426 444
78395	o ⁷ I	6	17148	3.5	602	1950 1952 1953 1954 1956 1957	1 1 1 1 1	14250 17770 15870 17470 18790 18740	3.8 3.6 3.4 3.4	570 587	 	12290	529 504 466 509	1	9102 9200 9581 9777	506 516
78423	i 1	5	12106	3.8	465	1949 1950 1952 1953 1954	1 1 1 1	12926 10420 13300 11220 12670	3.4 3.7 3.7	503 359 492 420 550	1 1 1	13410 13340 14450 12320 11870	465 505 447		10257 12066	
784/7	9 1	4	8320	3.6	296	1952 1953 1954 1955	1	9200	3.6 3.7 3.5 3.6	341 336 287 226	1 1 1 1	9230 8990 9880 7370	335 314 331 256	1	8796 10802 9647	353
f8522	6 7	11	10354	3.4	355	1947 1948 1949 1950 1952	5 2 2 1 1	9626 8920 12725 13760 11470	3.4 3.4 4.0	342 300 423 352 360	1	9410 9560				
78732	2 9	39	10278	3.8	394	1947 1948 1949 1950 1951 1952 1953	6	9949 10662 9849 10330 10830 11950 11910	3.8 3.8 3.6 3.9		1	13390 13180 11620 12070 11850 11330	516	1	11467	4 ≥3
78732	3 1	6	10935	3.4	371	1949 1951 1952 1954 1955	1 1 1 1 2	12390	3.3 3.4 3.2	439 407 442 299 521	1 1 1 2	8760 8810 8900 10300	355 338 342 3/1	1 2	9211 9654	359 356
78839	9 1	5	12576	3.5	442	1952 1954 1955 1956 1957	1	8590	3.4 3.4		1	10370 13230 11740 10620 13030	469 482 444	1	12862 12361 11587 12208	489 477
79010	6 4	13	12663	3.5	Ա Ա Ա	1949 1950 1951 1953 1954 1955 1956	1 2 1 3 1 2 1 2	11640 10750 13650 12973 13160 14235 14250 13855	3.5 3.5 3.4 3.9 3.4 4.1	450 381 482 441 509 487 584 501	 1 3 1 1 2	11260 13220 12680 11190 13790 14910 14900 14705	439 480 451 414 489 506 513 556) 	12797 13985 14116 13799 13783	465 496 489 506 510
19301	9 1	3	13380	3.4	452	1953 1954 1957	 	14580 13106 12460	3.2 3.6 3.3	467 471 417	1 1 1	12160 11390 9830	432 429 334	1 1 1	11968 11412 10933	422 422 386
74514	3 3	7	116/5	3.5	406	1947 1948 1949 1950 1951	1 2 2 1	11280 12615 13675 11050 8920	3.4	407 431 489 410 323						
7961 I	3 19	66	10767	3.7	394	1947 1948 1949 1950 1951 1952	42 9 6 4 1	11112 11733 11387 11308 10150 9220	3.8 3.8 4.0	409 430 435 429 405 429	2 1 1	11954 11410 12420 11635 12250 10850	444 438 475 440 453 401			

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8Y 51	Re		R	ECORU AVI	RAGE E	3Y 51K	¥8 3	FRESHENING	YLAK				
SIKE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCI.		305-DAY RECORDS NO.	CONTEMP MILK LB.	. AV. FAT LB.	YEARLY H RECOROS NO.	MILK	
						1953 1954	HOLS: 2 1	FE1N 9875 8420	4.1	402 357	2 1	11395 13420	415 50o	2	11467 13560	473 505
79845	1 2	2	11175	3.7	4 06	1950 1951	1 1	12170 10180	3.5	401						
79984	1 17	58	10761	3.5	373	1947 1948 1949 1950 1951 1952 1953 1954	30 9 6 3 5 2 2	10324 11207 12233 12607 12668 11705 11260 11340	3.5 3.5 3.6 3.6 3.6 3.8 3.8	362 390 429 449 454 406 432 386	1 1 2 1	12950 10610 9495 9940	481 382 340 363	2 1	8241 8813	2n5 313
79984	6 I	1	14600	3.7	540	1952	1	14600	3.7	540						
799879	5 8	21	13054	3.5	460	1952 1953 1954 1955 1956 1957 1958 1959	1 1 2 3 1 5 3 4	11560 7180 11420 13417 12520 12940 12937 13053 15510	3.4 3.1 3.5 3.5 3.4 3.5 3.3	392 221 410 475 431 461 434 490 306	1 2 3 1 5 3 4	10400 11870 12037 9020 12098 12727 12613 12570	334 408 427 401 454 450 465 459	1 2 3 1 4 3 4	10388 10644 10951 8916 11298 12146 12672 13374	355 378 394 399 424 430 465 482
803878	3 43	142	11860	3-7	431	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	3 8 5 21 23 26 21 13 11 6 4	11020 10330 12962 12219 12167 12437 12750 13452 13051 12340 13358 11720	3.5 3.6 3.7 3.5 3.7 3.6 3.8 3.8 4.0 3.2	391 367 480 425 445 456 459 504 496 474 534 374	2 4 1 8 14 10 18 13 11 6 4	10800 10228 13260 11970 12624 12373 12044 12574 12388 11833 14285 11980	580 359 448 443 462 455 432 473 468 433 536	18 12 11 5 4	11616 12376 12159 11502 13326 12535	4/4 458 455 476 4/3
806222	2 19	53	10733	3.7	391	1947 1948 1949 1950 1951 1952 1953 1954 1955	2 10 8 10 7 6 2 3 4	10270 11006 12080 10829 10934 10462 9985 9967 11123 8170	3.8 3.7 3.1 3.8 3.6 3.6 3.6 3.9 3.9	378 409 440 405 422 382 361 390 428 341	1 2 2 2 2 2 2 2 4	12440 14585 12225 11670 11785 12220 11555 11808 11640	416 518 449 415 429 448 431 447 414	2 1 4 1	11423 12012 11731 11478	40 č 469 437 421
80891	6 1	4	16818	3.7	609	1952 1954 1956 1957	1	13760 15410 18830 19270	3.6 4.1 3.5 3.4	490 630 659 657						
81042	7 1	2	15445	4.1	619	1955 1959	1	13370 17520	4.3 3.8	570 668	1	13580 14620	538 562	1	14486 14203	562 553
811292	2 1	- 1	10310	3.5	363	1947	1	10310	3.5	363						
811414		1	10860	4.1	440	1953	1	10860	4 - 1	440						
81514	3 15	25	13252	4.2	556	1957 1958 1959 1960	3 9 9 4	12290 14760 11968 12663		498 627 495 515	3 8 9 2	14180 15141 13792 13390	532 581 522 540	7 8 3	11946 14506 13444 14061	442 554 511 544
815236	6 2	8	9564	3.8	361	1950 1951 1952 1953 1954 1955	1 1 2 2 1	9360 12030 10620 9050 10090 5690	3.9 3.9 3.0 4.0 3.3 3.5	367 466 396 366 331 197	1 1 2 2 1 1	14090 12360 11150 10600 10250 7530	438 438 406 381 347 263	2 1 1	11151 10802 9647	397 353 341
81704	4 98	295	11210	3.7	计算计	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	1 12 26 41 35 54 32 26 19 13	11930 9338 10940 10945 10491 11423 11057 11681 112219 12688 13675 13636 10560	3.9 3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.6 3.6	470 353 408 409 595 422 410 430 449 467 498 498 332	2 6 11 28 23 3 22 25 17 10 8	10885 12470 11233 11825 12050 11853 12240 12239 12202 12649 11080	385 458 412 424 432 431 446 456 474 500 465	20 21 22 17 11 7	11185 11688 11178 11524 12236 13133 11718	478 414 433
81828	0 і	1	10500	3.5	368	1958	ı	10500	3.5	366	1	9860	375	1	10595	3+7
82008	6 1	4	13140	3.8	501	1950 1951 1952 1956	1 1 1	13410 16110 11240 11800		509 610 467 417	1	16880 17210 15130 12630	599 668 562 457	1	13669	511

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTLKS NO.	KECURŪS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KECOKOS NO.	L8.	TLST PCT.		SC5-DAY RECORDS			YLARLY HE RECORDS NG.	MILK	
		-		7 2	7		HOLS									
820752	2 1	5	10694	3.8	407	1948 1949 1950 1953 1956	1 1 1 1	6650 10780 9970 17260 8810	4.1 3.6 4.0 3.8 3.6	270 391 401 659 314	1 1 1	13430 12400 12930	475 457 469	1	12666 12097	517 456
ĕ 2 ∠06!	5 135	J43	11086	3.9	431	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	12 42 61 63 54 37 29 24 16	11153 11310 11125 11138 11105 12100 12481 12678 13378 10280	3.8 3.9 3.9 3.9 3.9 3.8 4.0 5.9 3.9	418 433 429 431 431 459 496 500 525 396	25 51 57 49 37 26 22 16	11504 12280 11691 11992 12077 12613 13332 13495 13334 11683	413 450 440 444 446 473 495 501 506 481	49 55 49 34 21 22 16 4	11538 12007 11724 12232 13458 13141 13692 12816	428 447 434 457 502 475 523 473
82291	3 3	6	11904	3.8	451	1953	!	11100	3.9	436	1	12820	460	1	13004	452
						1954 1955 1956 1957	1 1 1 2	13110 11560 13350 11460	4.0 3.6 3.9 3.0	519 420 515 405	1 1 1 2	12780 11800 12030 11415	483 437 476 446	1	10486 13690	397 533
82305	5 1	7	14267	4.0	572	1952 1953 1954 1955 1956 1957	1 1 1 1 1	16550 17470 16570 14630 9000 10970 14680	4.1 4.2 3.8 4.1 3.7 3.8 4.1	684 729 636 598 335 418 606						
82852;	2 14	64	13329	3.5	468	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	4 4 5 6 0 6 1 6 4 6 5	11600 12443 12853 11810 11843 12657 14587 13662 12143 13905 15940 16120 9597 14900	3.55 3.43 3.55 3.65 3.67 3.67 3.88	406 432 443 399 389 421 517 482 427 599 560 367 560	2 3 4 3 2 5 6 6 7 6 4 6 5	4660 12740 12523 12740 12550 12080 12273 12705 12126 12953 14068 14098 11620 14400	174 465 452 459 456 429 471 4477 529 534 466 569	6 6 7 6 4 0	12061 12742 12051 12021 12892 13509 12898	445 468 446 447 483 509 503
828758	3 1	4	14568	3.6	525	1950 1951 1952 1954	1	12200 14840 14880 16350	3.5 3.9 3.6 3.4	429 572 541 556	1 1	12770 14020 14470	466 507 515	1	13047	473
83059	3 1	4	11740	3.4	403	1954 1955 1956 1957	 	11640 12650 10980 11690	3.5 3.4 3.5 3.3	412 431 382 386	1 1 1	13300 13100 11660 13100	474 501 454 493	1 1 1	12742 12982 12927 12949	465 474 470 477
83187	0 š	16	1552ช	3.4	533	1953 1954 1955 1956 1957 1958	2 2 3 3 3 3	15050 14860 14587 16093 16757 15913	3.6 3.3 3.3 3.3 3.2	555 556 474 532 550 512	2 2 3 3 3 3	14460 14525 13220 13980 14277 14850	489 505 500 502 523 549	2 2 1 2 2 3	12802 13456 13167 13168 14764 15496	492 498 487 490 546 572
83530	2 1	2	9400	3.6	340	1950 1954	1	10440 8360	3.4	359 320	1	8850 11700	307 401	1	10900	404
83670	9 1	1	15940	3.3	528	1955	1	15940		528				1	15511	571
83702	5 11	24	13610	4.0	540	1953 1954 1955 1956 1957 1958 1959 1960	2 2 3 3 4 2 7	11185 11625 14363 13567 15100 14575 13620 11130	3.6 3.8 3.9 3.8 3.9 4.1 4.0 4.1	405 435 564 501 589 598 553 462	2 2 3 3 4 2 6	11060 10590 13397 13370 13915 15040 11582 14470	438 418 518 524 546 543 445 533	1 2 3 3 3 1 6	12306 10813 12662 12717 13011 16557 11458 14181	447 431 498 503 521 610 447 531
83758	9 1	3	13633	3.3	444	1952 1953 1955]] }	16640 13560 10700	3.4 3.2 3.2	562 430 339	1 1 1	13090 10540 12800	440 379 452	1	11271 11598	382 410
84427	6 2	8	14820	3.8	559	1953 1954 1955 1956 1957 1958 1959	1 1 1 2 1 1	14660 13790 15410 17020 12990 17020 16450	4.1 4.0 3.5 3.5 3.7 4.2 4.2	600 547 545 587 484 714 696	1 1 2 1 1	13530 12100 15410 14635 13490 15020 15580	475 472 525 536 522 557 604	1 1 2 1 1	14137 14715 12742 13745 13603 15718 15707	523 542 469 510 513 586 608
84685	6 2	12	13010	3.7	473	1952 1953 1954 1955	2 1 2 2	11940 13720 13935 12470	4.1 3.2 3.8 3.8	484 440 516 470	2 1 2 2	12865 13770 15130 14600	523 464 545 520	1 2 2	14028 13680 13734	510 502 511

8/0458

3.8 524

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

3.8

3.7 493

L78

127.60

TABLE 15---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE ND.	DAUGHTERS NO.	RECORDS ND.		TEST PCT.		FRESH YEAR	RECORDS ND.		TEST PCT.		305-DAY RECORDS ND.			YEARLY HE RECORDS NO.		
						1953 1954 1955 1957 1958	HDLS 1 1 1 1	TEIN 16000 11450 16090 14680 14290	4.4 3.7	574 500 595 510 521	1 1 1	12450 13270 14230 13890 15630	495 537 587 556 646	1 1 1 1	1259D 13396 14334 13898 14726	496 538 572 555 611
87244	5 1	5	16862	3.3	560	1955 1956 1957 1958 1959	1 1 1 1	14340 16740 16150 18420 18660		489 586 534 638 553	1 1 1 1	14620 15360 13930 12380 14580	563 569 535 483 566	1 1 1 1	14486 15369 15347 14791 14203	562 579 582 569 553
87520	1 285	625	12104	3.8	457	1952 1953 1954 1955 1956 1957 1958 1959	14 78 125 134 90 91 51 37	12435 11933 11742 11779 12379 13249 13398 13730 12796	3.8 3.8 3.8 3.8	463 449 445 446 470 498 510 525 528	10 72 121 130 87 88 44 37	12735 11809 11919 12124 12711 13456 13170 13130 13406	462 435 443 447 470 495 502 485 508	7D 114 126 87 85 41 37	1 1587 12058 11721 12251 12636 13141 13179 13302	426 446 432 457 466 490 491 509
67626	2 14	66	12275	3.7	455	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	6 11 11 7 5 7 5 7 5 3 3 2	11610 12347 11941 12580 14800 13268 12479 14566 15237 14973 19130 16740	3.8 3.7 3.7 3.8 3.6 3.6 3.6 3.8 3.7 3.8	442 458 438 474 538 510 444 528 585 555 732 643	1 4 5 4 6 5 3 3 2 1	175 ID 122 ID 126 / 4 123 75 136 4D 120 95 118 78 13 48 2 14 2 3 3 14 7 2 3 15 5 6 0 16 3 2 D	581 465 455 453 508 441 511 538 547 565 590	6 5 3 3 2 1	1 1560 13043 14632 13607 16121 17015	426 485 548 518 592 632
87092	7 8	38	11247	3.5	398	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	6 3 6 4 5 4 1 3 1	11208 11383 10880 11495 11645 11442 10760 11250 10933 11660 14640 12430	3.6 3.6 3.6	383 410 372 411 414 410 361 399 398 443 516 449	1 2 2 2 3 3 1 3 1 1	12480 11015 11600 11750 9940 10187 8950 9740 10360 12160 10590	453 402 398 395 356 368 374 371 421 486 482	3 1 3 1 1	9839 8491 9498 9952 11903 11696	
87766	D 1	Ħ	13258	3.6	485	1953 1954 1956 1957	1 1 1 1	12110 14200 12070 14650		429 530 432 548	1 1 1	15020 14820 15680 16660	542 533 552 597	1	14889	538
8799 <i>6</i>	2 37	87	10880	3.7	399	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 18 19 13 8 6 8 4 2 2	11283 10842 10375 10904 10045 10388 11263 13165 11340 10410 12580	3.6 3.6 3.6 3.8	393 411 371 390 361 393 414 472 432 399 473	3 10 9 6 4 6 2 1 2	10033 10323 10534 10550 12465 10638 10485 13390 12095 12210	408 377 385 376 472 399 374 499 442 450	9 6 5 7 3 2 2	9944 10310 11746 9443 10562 12873 11391	367 373 439 354 397 473 425
88018	8 2	7	12320	3.8	458	1954 1955 1956 1957 1958	1 2 2 1 1	12630 9555 13455 14210 14500	3.8 3.9	499 354 518 476 489	1 2 2 1	14910 13080 13875 12780 14790	548 513 576 562 538	1 2 2 1 1	13680 11511 12219 9777 8993	538
88137	6 1	3	16800	4 • D	680	1954 1956 1957	1 1 1	13910 17840 18650		563 703 774		1909D 1622D 1549D	733 616 581	1 1 1	17658 13887 14955	676 523 562
88483	8 3	6	15611	4.D	615	1956 1957 1958 1959	1 1 2 2	14150 15330 17405 16805		578 657 692 631	1 1 2 2	14560 15920 14900 16255	546 597 556 596	1 1 2 2	14105 14508 12138 16138	531 553 543 620
88583	D I	2	10610	3.7	392	1958 1959	1	10680 10540	3.6 3.8	384 400	1	12540 11570	462 423	1	13189 12012	485 448
88860	2 1	2	13815	3.5	488	1958 1959	1	13180 14450		465 511	1	1423D 13440	508 501	1	1332D 1369D	49 <u>1</u> 506
88918	1 12	15	12824	3.9	500	1955 1956 1957 1958 1959 1960	3 1 1 1 8	11207 11260 11710 17520 14070 8620		424 452 439 590 551 338	3 1 1 1 7	11903 16130 14820 14690 14101 7200	469 568 546 534 534 324	3 1 1 1 7	10657 14988 11074 8993 14765 11085	451 546 414 487 554 410

TABLE 15.--DAUGHTEK-AVERAGE OF SIRLS IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BKLEU,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

					RUS FR		STATE UNI									
	DAUGHTER	AVERAGE	12 Y8	RE		К	ECORO AV	LRAGE	BY SIK	E BY	FRESHENT NG					
SIRE'	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.		305-DAY RECURUS NO.	MILK		YLAKLY H RECOROS NO.		F4T
							H0LS	TEIN								
889312	2 3	5	13164	3.7	477	1953 1954 1955 1956	2 1 1 1	11960 12950 14810 19300	3.6 3.8	449 471 567 550	2 1 1	15315 18540 17600 18080	513 609 589 578	1	13004 18268	452 635
89018	1 4	4	12138	4.2	510	1958 1959	1 3	11116 12480		402 545	1 3	13280 1426 7	493 548	1 2	14170 14961	537 583
891636	5 3	9	14930	3.8	567	1953 1955 1956 1957 1958 1959	1 3 2 1	16380 17120 14190 17375 15870 13260	3.6 3.8 3.7 4.1	648 616 544 643 649 563	 1 3 2 1 1	10900 14020 12567 15755 16790 15400	396 571 480 593 618 574	i 1 2 i 1	10017 14334 13173 13898 16590 15478	359 572 513 555 610 579
893550) 1	1	18830	3.3	613	1955	1	18830	3.3	613						
893638	3 597	1363	12094	3.7	445	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 12 41 63 84 128 135 166 175 157 151 123 116 8	10925 10286 11528 11850 11728 11933 12156 12360 12735 12790 13445 12678 14574	3.7 3.7 3.7 3.7 3.7 3.6 3.7 3.7 3.7 3.7	398 375 425 436 431 414 437 440 454 465 472 497 470 524	1 4 15 27 45 79 126 159 168 150 141 105	11110 11500 12133 11310 12385 12053 11980 11919 12327 12461 13324 13245 12546 12119	404 429 448 426 447 440 441 458 478 494 509 469	115 149 162 145 130 101 114	11521 11796 11943 12289 12668 13252 12990 12039	424 435 441 460 469 496 486 455
b97452	2 i	2	10240	4.0	410	1958 1959	1	10210		390 430	1	12150 11560	459 422		13189 12655	485
898470	0 25	72	11276	3.6	407	1948 1949 1950 1951 1952 1953 1954 1955	8 20 10 13 8 5 4 3	11041 11502 11014 11832 12324 12190 13528 15440	3.8 3.6 3.5 3.6 3.5 3.4	398 430 398 431 435 441 469 533 727	1 3 4 6 6 5 4 3	12040 13787 12385 12118 13517 12962 12113 13193 16250	452 460 502	5 3 3 1	11619 11757 12255 14475	423 429 450 581
90027	4 1	1	14370	4.3	615	1959	i i	14370	4.3	615	1	14720	561	1	16143	632
901445	5 4	5	13490	3.7	498	1954 1957 1958	2 2 1	14545 13310 11980	4.0	509 529 460	2 2	13500 14050	497 501	2 1	13162 12906	487 444
902030) 5	12	12143	3.6	445	1950 1951 1952 1953 1954 1955	3 1 3 2 2 1	14593 8830 13480 15900 11355 15710	3.4 3.5 3.7	544 301 482 591 411 579	1 1 2 1	10860 14850 14610 10780 14080	389 527 519 387 489	1 2 1	14225 11233 13320	532 409 487
90250	0 /91	501	12053	3.7	439	1954 1955 1956 1957 1958 1959	32 93 97 106 90 78	11949 11176 11663 12611 12818 13197 12326	3.1 3.7 3.6 3.7 3.6	432 405 425 454 473 481 457	32 91 96 100 83 76 4		459 454 469 486 488 462 445	29 88 89 97 74 75	12013 11544 11882 12482 13466 12975 12169	452 430 447 463 502 485 454
90271	5 5	11	13174	3.7	488	1955 1956 1957 1958 1959	2 2 3 2 2	11055 13185 13810 13145 14390	3.8 3.8 3.4	410 500 524 522 558	2 2 2 1	13040 11585 10710 14405 15410	518 430 407 515 574	2 2 1 2 1	12416 10873 10628 14121 16099	435 424 448 507 596
90321	2 1	1	16060	3.5	567	1959	1	16060	3.5	567	1	10040	400			
90353	7 1	4	14650	3.8	558	1955 1956 1957 1958	1 1 1 1	15020 13560 13510 16510	3.0 3.8	562 493 512 663	1 1 1	14170 14110 13400 14150	497 487 487 547	1	12808	485
90458	1 1	1	11240	4.3	488	1955	1	11240	4.3	488	1	10570	416	1	11369	399
90486	۱ ک	1	12650	3.6	461	1959	1	12650	3.6	461						
90489	2	ц	11370	3.6	406	1957 1958 1959	2 1 1	10840 16120 10900	3.4	377 623 433	1	12160	428			
86c09	3 6	10	14311	3.8	542	1955 1956 1958 1959 1960	2 2 2 3 1		3.6	565 456 534 535 575	2 2 2 3 1	13280 14320 15415 14657 14250	527 516 576 562 527	2 1 2 3 1	13424 13669 14683 14290 14181	518 501 548 539 531

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY
DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	8Y S16	RE		RE	ECORD AV	ERAGE 8	3Y 51K	E BA	FRESHENING	YLAK				
SIRE NO.	UAUGHTERS NO.	KECUROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY RECURDS NO.			YLARLY H KLCURDS NO.		
							HOLS	TEIN								
906000	7	9	14039	3.9	545	1958 1959	5 4	14412 14380	3.9 3.9	568 566	4	14813 13475	562 535	14 14	13900 13644	531 515
909229	1	1	10810	3.6	389	1956	1	10810	3.6	389	1	15010	552			
910029	2	8	17812	3.5	618	1953 1955 1956 1957 1958 1959	1 1 2 1 1	14490 17480 18190 16350 16330 16010 23330	3.5 3.7 3.4 5.3 3.5 3.5	507 652 679 560 533 521 779	1 1 2 1 1	16080 13810 13990 14315 14720 14560 17130	544 523 535 538 561 543 665	1 2 1	12459 15086 14039 16099 17266	556 512 610 647
910046	1	1	10440	4.1	423	1952	1	10440	4.1	423						
914050	1	2	13720	3.8	512	1957 1959	1	16020 11420	3.6 3.9	578 445	1	15390 10950	567 381	1	14669 11794	538 433
914858	240	387	12829	3.7	468	1955 1956 1957 1958 1959 1960	45 86 89 87 75 5	12215 12680 12681 13130 13637 12098	3.6 3.7 3.6 3.7 3.7 3.6	437 463 465 483 497 440	44 81 80 77 74 5	12551 12906 13115 13301 12932 11760	472 483 491 494 489 428	42 76 78 73 70 5	11929 12287 12652 13228 12974 12086	446 462 469 493 465 465
920562	. 3	4	11257	4.0	442	1958 1959	2	11855 9775	4.1	471 390	2	12370 10075	454 386	2 2	14541 11325	528 428
92 08 7 1	4	7	13397	3.8	502	1956 1957 1958 1959	1 2 3 1	10430 14440 14760 13480	3.6 3.9 3.7 3.8	372 562 551 514	1 2 3 1	12570 13715 12717 14860	435 529 477 563	1 2 3 1	12622 12459 12684 14508	437 478 483 554
921170	173	429	11909	3.6	422	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 26 59 68 80 78 52 35 22	12345 11979 11348 11730 11987 12144 13377 13161 13474	3.8 3.6 3.6 3.6 3.6 3.5 3.5 3.5 3.5	462 427 397 416 426 432 466 467 478 468	2 14 38 61 74 75 49 33 17	11040 12096 12088 11496 12078 11875 12789 13436 13276 12369	400 440 441 433 446 437 472 497 498	57 72 71 46 32 15 7	11006 11977 11330 12303 12821 13594 12382	413 445 417 458 477 507 457
921853	3 1	2	12335	3.7	461	1956 1957	1	11300 13370	3.6 3.8	409 512	1	12260 11750	429 405	1	12622 1225 <i>2</i>	437 422
921858	2	7	10751	4.1	433	1953 1954 1955 1956 1957	1 2 2 1 1	11340 11640 9770 14060 8590	4.0 4.2 4.0 3.6 4.0	458 487 389 512 343	1 2 2 1	9540 11005 10625 9470 11670	351 474 432 363 446	1 2 1 1	9254 9211 9287 9581 10410	337 421 501 367 402
922288	1449	2147	13100	3.7	485	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 29 54 108 191 205 328 466 670 95	12510 12396 12485 12838 12523 12752 13012 13520 13389 13026	3.5 3.6 3.7 3.7 3.7 3.7 3.7 3.7 3.7	436 445 457 474 461 467 480 502 497 475	16 49 100 186 190 297 418 649	11523 11642 11875 12159 12736 13116 12975 12764 12624	414 427 443 455 473 491 487 483 481	45 92 169 176 273 395 652 73	11249 11917 11781 12170 12433 13030 13276 13375	411 443 439 456 465 487 497
9233 14	50	84	14625	3.8	556	1953 1954 1955 1956 1957 1958 1959	13	10620 13879 14001 13490 13911 15674 15213 16025	3.6 3.7 3.7 3.6 3.8 3.8	491 536 599 581	13 12 15 19	13370 15286 15326 13444 12983 14023 14146 14520	492 490 541 538	10 6 15 17		482 480 537 542
92 33 18	3 1	3	7 193	3.3	232	1954 1956 1957	1	5170	3.4 3.2 3.2	163	1	79⇒0	286 266 2 7 5	1 1	9047 7641 0927	322 268 311
924564	\$ £	9	13201	3.7	487	1953 1954 1955 1957 1958 1959		12700 15435 15670 14450 12066 8090	3.6 3.8 3.6	545 595 518 481	2 1 2	11610 12900 11320 14940 12200	516 422	1 2	11287 15685	451 422 543
92610	1	3	10040	3.3	328	1953 1954 1955	! !	11580 8340 10350	3.7	308	1	12940 12840	457 454	1	10955 125 7 9	
926363	3 1	7	16399	5.5	548	1953 1954 1955 1956 1957 1958 1959	1 1 1	12450 13490 18670 17660 21150 17900 13470	3.3 3.5 3.4 3.0 3.2 3.1	414 474 639 632 687 562	 	17840 16890 15570	420 517 524 628 618 600	1 1 1 1	13941 14857 16252	495 457 512 537 586 594
927962	2 5	10	13615	3.8	528	1953	1	8900	3.9	347	1	11680	458			

TABLE 15.--OAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

171

DAUGHTER AVERAGE BY SIRL

SIKE NU.	LAUGHTERS NU.	RECUROS		TEST PCT.	FAT LB.	FRESH YEAR	KECORDS NO.		TEST PCT.	FAT	305-UAY RECORDS			YEARLY H KELORDS NO.		FAT
						1954 1955 1956 1958 1959 1960	HOEST 1 1 1 3 2 1	10730 11160 10720 16407 12530 15270	3.7 3.5 3.8 4.0 3.8 3.6	393 391 403 662 489 349	1 1 3 2	12800 13000 12510 12663 12510 14180	457 475 463 508 456 522	1 1 1 3 1	13178 12884 12143 12330 13941 14214	461 434 450 433 522 531
93071	6 5	15	13212	3.5	454	1949 1951 1952 1953 1954 1955 1956 1957	2 1 2 3 1 2 2 1	14245 12850 12420 12357 13260 14630 15235 9900 13730	3.3 3.4 3.0 3.7 3.3 3.4 3.3 3.4	472 435 451 460 441 474 466 314 555	2 3 1 2 2 1	12975 11997 8260 9440 11385 14960	537 465 374 390 448 553 544	2 2 1	9254 9369 11074 13680	335 378 414 534
93003	4 2	2	14030	3.8	530	1955 1959	1	13480 14560	3.6 3.9	490 569	1	14300 14300	589 555	1	14334 13418	5 7 2 513
93808	2 2	3	12163	4.1	490	1956 1957 1958	1 1 1	13080 12830 11376	4.1 3.8 4.2	334 486 482	1 1 1	14260 14720 130a0	54 1 557 457	1 1 1	14791 15249 12219	556 573 440
94 178	0 8	16	12388	3.7	453	1950 1951 1953 1954 1955 1956 1957	2 2 1 1 3 3 2 2	10815 11950 13020 12640 12510 16313 14565 13885	3.6 4.0 3.9 3.2 3.7 3.6 3.4 3.8	389 476 502 402 462 592 500 519	1 1 1 3 3 4 2	12700 12060 12780 14313 11627 11475 12730	521 495 505 525 491 440 498	1 1 2 3 1 2	12590 13396 14329 11413 10628 13543	476 558 547 468 448 512
942629	9 5	7	11015	4.0	439	1956 1957 1958 1959	1 1 3 2	7510 13040 13003 10795	4.2 3.7 4.0 3.9	315 489 529 422	1 1 3 2	14520 13320 12123 12120	553 495 469 518	1 1 3 2	15086 13320 12321 12421	576 500 46 7 463
94374	9 1	1	11490	3.9	450	1959	1	11490	3.9	450	1	12760	50)	1	13778	534
94 70 91	4 I	Ħ	16690	3.5	585	1953 1954 1955 1958	1 	15480 15550 18210 17520	3.3 3.4 3.3 3.8	544 528 594 672	1 1 1	13120 13740 13770 16140	460 495 482 600	1 1 1	14137 14715 12742 15718	5∠3 54 / 46 / 586
94915	9 6	6	13320	3.5	464	1959 1960	5 1	13930 10270	3.5 3.5	484 36 1	5 1	12896 11210	483 4 1 4	5 1	13588 12840	513 431
950641	3 1	1	12570	3.6	457	1960	1	12590	3.6	459	1	10760	404	1	13374	510
95105	B 1	2	12735	3.7	462	1958 1959	1	14880 10590	3.6 3.7	536 388	1	11850 9840	441 369	1	11129 10159	411 375
95242	1 2	2	14 1 0 5	3.9	551	1958 1959		13150 15060	4.0 3.8	5∠3 579	1	14510 15600	553 552	1	12808 15 79 4	485 562
95549	3 14	18	13258	3.8	507	1958 1959	6 12	12250 13279	3.9 3.8	475 506	5 11	13262 12771	496 479	5 10	14994 13086	564 487
95553	2 i	ı	13980	3.5	495	1958	1	13980	3.5	495						
95561	9 3	5	11707	3.8	450	1954 1955 1956 1957	1 1 2 1	7360 14980 13360 13820	3.4 4.2 4.0 3.8	247 632 524 525	1 1 2 1	14370 14050 13345 13340	491 571 546 525	1 1 2 1	12491 14334 13609 12829	440 572 545 480
95608	1 7	13	11602	3.7	431	1955 1956 1957 1958 1959	3 1 2 3 4		3.9 3.4 3.7 3.9 3.6	384 421 467 346 445	3 1 2 3 4	11253 12930 13660 14420 12560	404 481 520 560 478	3 1 2 3 4	10464 13667 12781 15002 13661	332 501 470 569 518
96342	2 1	1	15960	3.5	559	1959	1	15960	3.5	559	1	15540	553	1	15794	562
96439	5 2	5	12179	3.5	420	1954 1955 1956	1 2 2	11500 11580 11885		432 401 398	1 2 2	12860 11710 10715	486 429 371	2 2	11767 11952	
96459	9 1	2	15870	3.5	555	1958 1959	1	18330 13410	3.4 3.0	631 479	1	18170 16490	670 637	1	15642 16121	576 594
96621	8 2	2	12975	4.2	551	1959 1960	1 1	13530 12420	4.5 3.9	614 487	1 1	11260 11260	419 419	1	13865	514
96647	0 2	4	15289	3.8	576	1957 1958 1959	1 1 2	16940 17390 15390	3.9 4.1 3.7	657 710 575	1 1 2	15460 16230 15670	547 592 567	1 2	16557 15500	
9666 I	0 1	1	14760	3.7	542	1953	i	14760	3.7	542						
96787	3 2	2	14295	3.6	510	1959	2	14295	3.0	510	2	14365	517	2	15538	570
96854	4 1	2	12770	4.9	629	1958	1	12740	5.0	638	1	15630	578	1	1609≯	600

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-0AY RECURDS NO.			YEARLY HE RECURDS NO.	MILK	
						1959	HOLS	TEIN 12800	4.8	620	1	14780	563	1	15369	579
968796	5 1	1	7510	3.6	271	1959	1	7510	3.6	271	1	9250	337	1	9788	361
96921	1 1	3	12943	4.0	521	1956 1957 1958	1 1 1	13440 12640 12750	4.2 3.8 4.1	563 478 521	1	13980 13530 15260	527 495 572	1	15086 14039	556 512
96966	7 6	6	13030	3.7	487	1958 1959	2 4	14020 12535	3.7 3.7	515 473	2 4	14355 14370	520 541	2 3	14808 14926	543 562
96966	9 13	15	13696	3.8	515	1958 1959 1960	3 11 1	15590 13069 17200	3.9 3.7 3.8	614 489 651	2 11 1	14730 13154 13660	564 498 505	2 11 1	14050 13197 14383	539 497 530
974771	2	14	14445	3.7	520	1956 1958 1959	1 2 1	18120 14195 17840	3.3 3.7 3.5	590 524 632	1	17810 16850 13260	631 601 511	1	14857 16263 15260	537 594 574
97568	3 10	11	13106	3.8	493	1958 1959 1960	1 8 2	15030 13298 12605	4.0 3.8 4.0	595 496 499	1 8 2	14140 13858 13835	537 524 491	1 7 1	13701 14246 11467	519 519 432
976472	2 1	1	13250	3.8	499	1959	1	13250	3.8	499	1	14270	657	1	15794	562
97670	9 5	6	12308	3.6	446	1958 1959	2 4	12360 11788	3.5 3.7	427 435	2 4	12165 11643	505 439	2 4	12410 11448	448
976716	0 1	1	10960	4.1	440	1959	1	10960	4.1	448	1	14580	528	1	14606	529
97875	5	7	11640	3.7	432	1958 1959 1960	3 3 1	13227 10727 12620	3.8 3.7 3.5	508 398 443	3 3 1	14060 1216 7 11980	520 461 449	3 3 1	13651 12038 11118	518 453 417
98130	3 2	3	15090	3.6	539	1959 1960	2	15495 12920	3.6 3.5	548 451	2	15895 13380	572 488	2	15255 13069	565 482
98479	9 11	11	15236	3.7	567	1958 1959 1960	4 6 1	15015 14933 17940	3.7 3.8 3.5	556 566 621	4 6 1	11840 14353 14860	458 533 554	2 6 1	13876 15255 15631	506 573 583
98786	7 10	14	10941	3.8	410	1955 1956 1957 1958 1959 1960	1 2 1 4 5	14720 10805 10580 12360 11800 4780	3.7 3.7 3.9 3.8 3.8 3.8	551 403 415 467 446 175	1 2 1 4 5	14050 11675 14360 13200 12860 11600	572 485 583 491 488 435	1 2 1 3 4	14334 11385 13896 13153 13614	572 482 555 504 511
98846;	2 233	362	12996	5.7	485	1954 1955 1956 1957 1958 1959 1960	6 57 85 55 68 79 12	13010 12286 12283 12634 13421 14061 13632	3.8 3.7 3.7 3.6 3.6 3.6	486 453 458 473 506 528 510	5 55 82 54 63 77 10	12438 12217 12529 12774 13165 12956 13132	457 456 471 481 502 490 510	5 53 75 51 60 75 9	12208 11683 11977 12672 13083 13315 15515	444 451 461 466 494 504
989939	9 7	9	12954	4.2	542	1958 1959	2	12045 13507	4.2 4.2	569	2 7	14885 13814	585 527	2 6	15249 14129	585 543
99022	1 234	592	11983	3.5	413	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	17 46 108 109 100 73 52 41 32	11270 11315 11999 11660 11853 12348 12261 13633 13841 14186 13730	3.4 3.5 3.5 3.5 3.5 3.4 3.3 3.5	383 392 416 402 410 427 424 467 461 470 475	5 19 62 93 92 71 49 39 30 13	11974 11582 11449 11400 11421 11877 11653 12581 12953 14075	456 432 421 423 420 436 443 472 485 544 350	91 85 68 48 35 28 12	#1073 11352 11421 11401 12444 12787 13337	411 420 419 427 407 470 470 497
99376	4 1	1	14690	3.9	566	1958	1	14690	3.9	566	1	14450	517			
99561	9 2	6	12686	3.5	439	1955 1956 1957 1958 1959	1 2 1 1	10000 13195 14950 13800 13920	3.4 3.5	335 440 524 537 486	1 2 1 1	12670 12940 13350 13520 14660	493 472 507 540 534	1 2 1 1	12513 12786 14181 14170 13723	463 457 514 537 516
99625	2 371	486	12854	3.8	480	1955 1956 1957 1958 1959 1960	6 64 101 135 159 21	11738 12681 12970 12855 12929 13207	3.7 3.6 3.6 3.8	476 473 490 490 489 499	6 61 91 124 155 20	11765 13466 13852 13340 13055 12576	465 500 518 499 484 504	60 87 111 152 17	12056 12743 13193 13300 13082 13611	461 475 492 497 488 493
99748	1 5	7	14024	3.6	506	1958 1959	2 5	14815 13520	3.6 3.0	535 493	2 5	14185 1262 6	527 467	2 5	13593 12834	513 482
99493	8 I	1	100/0	3.8	380	1959	1	10070	3.8	380	1	10460	385	1	10976	408
٧ د 1000	0 9	11	14491	3.8	541	1958	2	16285	3.9	623	2	13315	527	2	14170	537

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE
RECORD AVERAGE BY SIRE OY FRESHENING YEAR

	OAUGHTER	AVERAGE	BY ST	RE		R	LCORO AVI	ERAGE 8	Y SIR	E OY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.	MILK L8.		FAT L8.	305-DAY (RECORDS NO.			YEARLY HERECORUS		
						1959	HOLS	TEIN 14073	3.8	524	9	13531	508	9	14527	537
1001512	2	2	10940	3.4	369	1958 1959	1	9370 12510	3.4 3.4	316 421	1	14830 12680	537 477	1	14235 13592	513 514
1003598	8 8	9	11985	3.8	454	1958 1959 1960	3 4 2	14017 11710 9170	3. 1 3. 9 3. 9	511 462 359	3 4 2	14447 12920 7840	544 488 292	3 4 2	13534 13614 12868	507 516 482
1004232	1	1	10150	3.8	382	1957	1	10150	3.8	382	1	13550	497	1	14181	514
1005575	1	1	11160	4.5	501	1959	1	11160	4.5	501	1	11200	452	1	12731	467
1007194	1	1	10740	4.1	446	1959	1	10790	4 - 1	446	1	10320	399	1	8164	329
1007680	3	5	13670	3.6	494	1958 1959	3 2	13433 15665	3.0 3.7	486 562	2 2	15150 17210	594 656	2 2	14988 16830	573 637
1008622	1	1	11570	3.7	428	195ø	1	11570	3.7	428	1	15310	571	1	13200	488
1011960	1	1	14980	4.3	641	1959	1	14980	4.3	641	1	15850	607	1	15522	598
1012593	1	1	10860	4.0	434	1958	1	10860	4.0	434	1	13700	479	1	13581	474
10 137 18	1	1	9820	3.4	335	1959	1	9620	3.4	335	1	10860	409			
1013760	1	2	14550	2.7	391	1958 1959	1 1	15430 13670	2.9	440 342	1	11050 10470	384 370	1	12393 10867	455 354
1015792	1	1	12640	4.0	511	1957	1	12640	4.0	511	1	7960	300			
1019585	164	178	13015	3.5	461	1958 1959 1960	28 126 22	13177 13149 12460	3.5 3.5 3.6	462 462 455	27 128 21	13431 13160 11796	499 491 447	26 124 19	13389 13366 13087	498 499 488
1020277	2	4	11850	3.7	429	1956 1957 1959	1	10970 9340 13710	3.6 3.5 3.7	399 327 502	1 1 1	13150 12760 14700	466 460 533	1	11903 12906 12731	417 444 467
						1960	1	13380	3.6	488		12920	451	1	13069	482
1023347		1	13010	3.6	469	1959	1	13010	3.6	469	1	14590	542	1	15424	562
1025792		1	11800	3.5	415	1959	1	11800	3.5	4 15	1	15340	561	1	10867	412
1026115	9	10	14993	3.8	569	1958 1959 1960	4 5 1	14660 13944 21610	3.9 3.6 3.4	560 533 745	2 5 1	12725 12684 14740	458 466 526	2 5	122 19 12731	440
1028123	3	3	14137	3.8	531	1959 1960	2	12995 16420	3.9 3.7	497 601	2	12560 11470	488 430	2 1	11391 15064	456 557
1030404	2	2	7470	3.4	254	1959	2	7470	3.4	254	2	8440	306	2	7881	291
1030458	6 ¢	123	11708	3.8	цц <i>7</i>	1953 1954 1955 1956 1957 1958 1959	2 26 33 22 14 12 11	8085 11808 11693 12450 11548 11610 13465 13293	4.4 3.9 3.8 3.8 3.8 3.8 3.8	353 457 444 472 434 439 504 514	2 25 32 22 14 10 11	7585 12336 12355 12272 12136 12461 12337 12347	332 459 461 452 455 491 474 485	2 23 29 20 13 9 11	9478 12335 11890 12095 11829 12619 12719 12328	400 454 442 450 441 466 486
1030640	108	146	12310	3.6	443	1955 1956 1957 1958 1959 1960	10 20 13 21 69 13	11074 10953 12678 12870 12504 14032	3.5 3.5 3.6 3.6 3.6	389 389 449 462 449 521	10 20 11 19 66 13	11773 12598 13510 12659 12523 12722	443 467 503 480 463 463	10 16 10 18 65	11439 11878 11819 12842 12933 13009	422 445 437 463 461 486
1031501	393	615	12125	3.8	456	1953 1954 1955 1956 1957 1958 1959	5 20 69 103 98 118 175 22	11624 10782 11072 11699 12405 12217 12644 13021	3.7 3.9 3.9 3.8 3.8 3.8 3.8	433 415 427 446 469 463 474 473	5 20 69 105 88 98 172 20	12186 11613 12324 12713 12812 13014 12445 12611	443 430 463 475 487 495 468	5 19 68 102 85 91 158	11997 11596 11904 12059 12340 12983 12841 13010	430 431 445 455 466 488 482 479
1032815	2	2	12875	3.3	403	1959	2	12875	3.3	403	2	13065	500	2	12650	494
1033024	1	1	16050	3.2	520	1959	1	16050	3.2	520	1	14210	530	1	14 18 1	531
1033908	3	3	13430	3.8	506	1958 1959	1 2	12540 13875	3.9 3.8	494 512	1 2	15820 12005	585 463	1 2	8993 12 3 23	487 507
1034466	1	3	10687	3.8	410	1955 1956 1957	1 1 1	10020 11940 10100	3.8 3.9 3.8	383 461 386	1	10780 11520	408 449	. 1	10290	392
1034467	2	2	15105	3.7	560	1959	2	15105	3.7	560	2	14645	560	2	14563	562
1034472	2	5	12910	3.8	483	1953 1954	1	10120 14290	4.3 3.9	431 557	1	12490 14290	466 530	1	14028 13680	510 502

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY DREED,
BY YEAR OF FRESHENI-G--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUGHTERS NU.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KECURDS NO.		TEST PCT.	FAT LB.	305-DAY RECORUS			YLARLY HERECOROS		
						1955 1956 1959	HOLS	TLIN 14050 14460 12590	3.6 3.8 3.0	512 546 454	1 1	14450 14710 12910	528 554 475	1 1 1	13734 14857 13669	511 560 508
1038118	3 2	2	11975	4.1	47/	1959	2	11975	4.1	477	2	14405	550	2	14912	583
1038591	3	9	11648	3.7	430	1952 1953 1954 1955 1956 1957	1 1 3 2 1	13390 13940 11827 12620 14640 15900	3.5 3.6 3.7 4.0 5.6 3.6	470 496 441 493 525 578	1 1 3 2 1	10290 12420 12793 12975 11850 13260	417 427 471 476 432 472	2 2 1	12066 10622 12077 13069	424 307 423 463
1048678	3 1	1	8610	3.7	321	1959	1	8610	3.7	321	1	9270	336	1	10017	3/0
1054406	12	13	12705	3.9	490	1958 1959	3 10	15013 12248	3.6 4.0	522 491	2 10	13970 12959	5 34 49 1	2	13255 12856	511 477
1055483	3 1	1	7950	3.6	287	1959	ı	7950	3.6	287	1	10500	419	1	10682	435
1056882	? 36	46	13032	3.8	495	1955 1957 1958 1959 1960	1 3 9 29 4	10610 12813 13598 13284 14305	4.0 5.8 3.8 3.8 3.7	429 486 517 510 526	1 3 9 28 3	10490 12390 13160 13316 16653	385 452 502 513 646	3 9 26 2	11165 13079 13535 13604	412 489 509 506
1061894	2	2	14470	4.1	590	1958 1960	1	14730 14210	3.1 4.5	539 640	1	13870 12570	517 484	1	13778 12818	512 483
1061411	5	6	12478	3.7	459	1959 1960	5 1	13052 9320	3.1 3.2	486 295	5 1	14532 11350	539 424	5 1	14610 12895	548 477
1067863	3 195	286	11366	3.7	41/	1953 1954 1955 1956 1957 1958 1959	2 15 39 46 51 70 55	7290 10643 11270 10915 11414 11896 11989 12008	4.2 3.7 3.7 3.6 3.6 3.7 3.6 3.7	290 393 416 399 410 436 438 439	2 13 39 44 49 62 55	10915 11582 12027 12134 12404 12813 12355 12236	390 429 457 458 473 482 459 464	2 13 37 43 47 56 55	10224 11634 11689 11809 11910 12727 12785 13045	303 430 442 447 449 478 479
1068501	2	2	13905	3.8	535	1959	2	13905	3.8	o 35	1	10610	379			
1070036	5 2	5	15752	3.7	582	1953 1954 1957 1958 1959	1 1 1 1	13870 14060 18460 17540 14540	3.8 3.0 3.6 3.9 3.9	524 425 668 689 560	1 1 1 1	15650 14830 15120 12340 11390	569 543 547 453 416	1 1	14889 12971 12012	538 476 448
1074357	7 1	4	12250	4.2	512	1954 1955 1956 1957	1 1 1 1	11970 13000 11170 12860	4.2 4.2 4.3 4.1	497 551 475 526	i 1 1	12150 13200 11460 13380	442 521 435 514	1 1 1 1	11968 11892 12764 12154	456 451 501 461
1074864	+ 1	1	14630	4.2	619	1959	1	14630	4.2	619	1	13620	497	1	15227	560
1076273	3 48	79	12847	3.6	462	1956 1957 1958 1959 1960	24 26 17 8 2	12212 14164 13448 12836 10385	3.6 3.6 3.5 3.5	441 502 485 456 367	23 25 14 6 2	12202 13248 12768 12055 13005	454 502 491 465 472	20 24 15 7 2	12008 12673 12938 12661 13685	452 478 497 489 504
1081270) 1	1	10180	3.7	382	1957	1	10180	3.7	382	1	12750	451	1	13222	460
1081971	1 1	3	16590	4.1	686	1957 1958 1959	1 1 1	16310 15750 17710	3.9 4.2 4.3	639 665 755	1	15230 15570	538 604	1	14759 15489	544
1085462	2 2	2	11810	3.6	419	1959	2	11810	3.6	419	2	14130	539	2	13800	522
1085978	8 2	3	15278	4.1	599	1958 1959	1 2	15320 16660	3.9	591 629	1 2	13670 14115	532 517	1 2	14170 13571	537 515
1087972	4 5	5	13658	3.7	5 12	1958 1959	2 3	12000 14763	3.3	400 587	2 3	14475 13947	535 514	2 3	10590 14312	467 529
اد 10902	в 1	1	13540	3.4	465	1960	1	13540	3.4	465	1	14140	584			
109492	1 2	2	11880	3.7	437	1959	2	11880	3.7	4 3 7	2	11175	430	2	11195	423
1098258	В І	1	9660	4.1	398	1960	1	9660	4.1	398				1	15467	574
109947	7 2	2	12960	4.1	538	1959	2	12960	4.1	5 38	2	10975	393	2	10770	397
110019	3 3	3	12063	4.1	490	1958 1959	1 2	12420 11885	4.1 4.1	511 479	1 2	13700 9520	560 379	1 2	14726 10786	611 443
1106775	5 6	6	13423	3.7	502	1958 1959 1960	1 4 1	15880 14280 7540	3.5 3.8 3.7	563 542 278	i 14	14330 12848	510 470	1 4	13789 12783	495 465
1107436	6 6	8	12797	3.6	455	1957 1958	1	9430 11040	5.6 3.5	340 383				1	10715	407
						1959 1960	3 3	14247 11617	3.7	519 396	3 3	15590 14057	551 523	3 3	14250 13192	510 4/1
110986	4 1	1	8890	4.6	408	1959	1	8890	4.6	406	1	9850	381	1	10922	407

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

Mo. Mo. Mo. Le. PCT. Le. TEAR Mo. Le. PCT. Le. Mo. Le. Le. Le. Mo. Le. L						KDS FR	OM THIS	STATE ON	LY								
111975 4 5 12639 3-7 8-87 19-87		DAUGHTER	AVERAGE	12 Y8	RE		R	ECORO AV	LRAGE 8	SY SIR	Y8 3.						
1110175												RECOROS	MILK	FAT	RECORDS	MILK	
111076								HOLS									
1112211 1 10240 8-8 805 1900 1 18200 8-8 605 1900 1 18200 8-8 605 1900 1 18200 8-8 605 1 13600 1 13600 1 13600 1 13600 1 13600 1 13600 1 13600 1 13600 1 13600 1 13600 1 1 1 1 1 1 1 1 1				12639	3.9	490									•		404
1113276 3	1111076	5 7	7	10604	3.7	394	1959	5	11568	3.7	426	4	12815	479	4	13072	540 492 530
11150 1	1112211	1	1	18240	4.4	805	1960	i	18240	4_4	805	1	13630	496	1	15489	604
1119514 5	1113278	3	4	12970	3.7	481		1 3				•					549 514
1122266	1115014	1	è	11660	3.4	400	1959	1	11660	3.4	400	1	14440	537	1	13418	513
1125195 8	1119514	5	8	15728	3.5	555											513 520
1131918	1122266	5 1	1	11880	3.6	426	1959	1	11880	3.6	426	1	10610	399	1	10617	391
1132993 5	1125395	8	9	11451	3.7	422	1959	7	11510	3.7	427	i	13324	50 1	7	12929	530 486 550
1180766 1 1 9410 4.0 373 1960 1 9410 4.0 373 1 9400 318 2 11023 5 1151663 2 2 1015 3.0 9410 1 14070 4.0 373 1 8040 317 1 9440 4.0 1151663 2 2 1015 3.0 612 1799 1 14070 4.0 541 1 1810 544 1 151363 5 1152248 1 1 6020 3.5 228 1959 1 6020 3.5 228 1 9540 370 1 8160 3 1 1810 3 3 1 1810 3 3 1 1810 3 3 1 1810 3 3 1 1810 3 3 1 1810 3 3 3 1 1810 3 3 3 3 3 3 3 3 3	1131918	3 1	1	16830	3.9	652	1958	1	16830	3.9	652	1	15640	5 7 ε	1	8993	487
1140763	1132993	5	5	13466	3.9	528	1958	2	17355	4.1	698	2	13980	538	2	14/26	440 506 530
1152248	1140763	3 1	1	9410	4.0	373											468
1152748	1151863	3 2	2	16015	3.9	612	1959	1			561	1			1	16143	632
1153740 8																	583
1154817																	329
1156059	1155140	0	10	13041	3.5	491											528 511
1156726 2 2 5900 3.9 216 1960 2 5900 3.9 216 2 8360 286 2 15675 5 1156771 16 21 13710 3.9 530 1957 5 14254 3.7 525 5 13318 497 5 13470 5 1156771 16 21 13710 3.9 530 1957 7 14257 3.9 562 7 14007 520 7 14313 5 1157722 1 1 10980 3.3 380 1959 1 10980 3.3 360 1 9430 319 1 9134 3 1157726 2 2 18455 3.3 610 1959 1 18400 3.3 611 1 10440 369 1 10987 4 1158569 1 1 16910 3.3 562 1960 1 18510 3.3 608 1 10440 369 1 11247 4 1164014 2 2 11315 4.2 470 1959 2 11315 4.2 470 2 9610 367 2 9276 3 1167632 2 2 15405 3.9 592 1958 2 15165 3.9 592 2 14400 594 2 14726 6 1164034 1 2 14095 3.6 506 1957 1 18800 3.5 447 1 12490 42 1170480 1 2 14095 3.6 506 1957 1 18800 3.5 417 1 12490 42 1170480 1 2 14095 3.6 506 1957 1 1880 3.5 478 1 12400 3.5 417 1 12400 515 1 8993 4 1170470 1 1 1 8200 3.1 255 1960 1 1800 3.5 447 1 12400 515 1 8993 4 1170470 1 1 1 8200 3.1 255 1960 1 1800 3.5 447 1 12400 515 1 8993 4 117977 7 7 15501 3.8 587 1959 1 18400 3.5 448 1 13600 444 1 14584 5 1179779 2 3 17568 3.7 641 1958 1 15740 3.5 548 1 1800 517 1 14880 517 1 14810 517 1 14880 517 1 14810 517 1 14880 517 1 14810 517 1 14880 517 1 14810 517 1 14810 517 1 14810 517 1 14810 517 1 14810 517 1 14810 517 1 14880 517 1 14810 517 1 14	1154817	1	2	17680	3.4	593									1		576 589
1156771	1156059	2	2	12655	4.1	510						1					35 I 483
1157722	1156726	2	2	5900	3.9	216	1960	2	5900	3.9	216	2	8360	586	2	15675	581
1157986 2 2 18455 3.3 610 1959 1 18400 3.3 611 1 10440 369 1 10987 4 1 1158569 1 1 16910 3.3 562 1960 1 16910 3.5 562 1 14810 464 1 17647 6 1164014 2 2 11315 4.2 470 1959 2 11515 4.2 470 2 9610 367 2 9276 3 1167632 2 2 15165 3.9 592 1958 2 15165 3.9 592 2 14400 594 2 1476 6 1168575 2 2 13600 3.6 478 1959 2 13600 3.6 478 2 10475 381 2 12922 4 1170480 1 2 14095 3.6 506 1957 1 12860 3.5 447 1 12490 542 1 9777 5 1550 1 1 13 13127 3.7 490 1958 2 12920 4.0 520 2 13505 515 1 8993 4 1175467 1 2 10395 3.6 370 1959 10 12981 3.5 489 10 12613 483 10 12881 4 1179373 1 1 8200 3.1 255 1960 1 18600 3.5 417 1 14650 517 1 14584 5 1179574 7 7 15561 3.8 587 1957 1 15220 3.9 598 2 13810 541 1 14584 5 1179575 2 2 12845 3.6 463 1959 10 1820 3.7 595 1 13810 541 1 14584 5 1179575 2 2 12845 3.6 463 1958 1 15220 3.7 595 1 13810 541 1 14584 5 1179575 2 2 12845 3.6 463 1959 10 1800 3.7 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1959 10 1600 3.7 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1958 1 1520 3.7 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1959 1 1000 3.7 595 1 10440 3.5 590 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1958 1 15520 3.9 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1958 1 15520 3.9 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1958 1959 1 10440 3.5 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1958 1959 1 10440 3.5 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1958 1959 1 10440 3.5 595 1 14440 543 1 14554 5 1179575 2 2 12845 3.6 463 1959 1 10440 3.5 595 1 14440 543 1 14554 5 1179575 2 1179575 2 11850 3.7 600 2 13505 515 2 14176 5 1179575 1 10440 3.5 595 1 114440 543 1 14554 5 117959 1 10440 3.5 595 1 114440 543 1 14557 5 1179575 1 10440 3.5 595 1 114400 543 1 14557 5 117957 1 10440 3.5 595 1 114400 543 1 14557 5 117957 1 10440 3.5 595 1 114400 543 1 11457 5 1145	1156771	16	21	13710	3.9	530	1958	7	14257	3.9	562	7	14097	520	7	14313	502 531 609
1158569 1 1 16910 3.3 562 1960 1 16910 3.3 562 1 14810 464 1 17647 6 1164014 2 2 11315 4.2 470 1959 2 11315 4.2 470 2 9610 367 2 9276 3 1167632 2 2 15165 3.9 592 1958 2 15165 3.9 592 2 14400 594 2 14726 6 1168575 2 2 13600 3.6 478 1959 2 13600 3.6 478 2 10475 381 2 12922 4 1170480 1 2 14095 3.6 506 1957 1 12860 3.5 447 1 12490 542 1 9777 5 1170910 11 13 13127 3.7 490 1958 2 12920 4.0 520 2 13590 508 2 13903 5 1175467 1 2 10395 3.6 370 1959 10 12981 3.8 489 10 12613 483 10 12881 4 1170933 1 1 8200 3.1 255 1960 1 8200 3.1 255 1 13810 541 1 14584 5 1179574 7 7 15561 3.8 587 1957 1 15740 3.5 548 1 16290 644 1 14519 5 1179799 2 12845 3.6 463 1958 1 15250 3.9 594 6 13773 533 6 14372 5 1179895 3 3 11373 3.5 403 1959 1 15080 3.9 595 1 14440 543 1 14551 5 1179895 3 3 11373 3.5 403 1959 1 15080 3.9 595 1 14440 543 1 14257 5 1179895 3 3 11373 3.5 403 1959 2 18120 3.7 600 2 15505 515 2 14176 5 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12253 463 17 11854 48 1 15370 47 1958 25 13004 3.5 417 1 1450 545 1 14317 5	1157722	2 1	1	10980	3.3	360	1959	1	10980	3.3	360	i	9450	319	1	9134	326
1164014 2 2 11315 4-2 470 1959 2 11315 4-2 470 2 9610 367 2 9276 3 3 1167652 2 2 15165 3-9 592 2 14400 594 2 14726 6 6 1168575 2 2 13600 3-6 478 1959 2 13600 3-6 478 2 10475 381 2 12922 4 1170480 1 2 14095 3-6 506 1957 1 12860 3-5 447 1 12490 542 1 9777 5 1 12860 3-7 565 1 12610 515 1 8993 4 1 170910 11 13 13127 3-7 490 1958 2 12920 4-0 520 2 13590 508 2 13903 5 1959 10 12981 3-6 489 10 12613 483 10 12881 4 4 1960 1 15640 3-5 550 1 14010 519 1 14584 5 1 14584	1157986	2	2	18455	3.3	610		1				i 1			1		404 413
1167632	1158569	1	1	16910	3.3	5 6 2	1960	1	16910	د . 3	562	1	14810	464	1	17647	640
1168575 2 2 13600 3.6 478 1959 2 13600 3.6 478 2 10475 381 2 12922 4	1164014	2	2	11315	4.2	470	1959	2	11315	4.2	470	2	9610	367	2	9276	351
1170480	1167632	2	2	15165	3.9	592	1958	2	15165	3.9	592	2	14400	594	2	14726	611
1958		_	2	13600	3.6	478	1959	2	13600	3.6	478	2	10475	381	2	12922	468
1959 10 12981 3.8 489 10 12613 483 10 12881 4 1960 1 15640 3.5 550 1 14010 519 1 14584 5 1175467 1 2 10395 3.6 370 1959 1 8950 3.6 323 1 13000 465 1 12655 4 1960 1 11840 3.5 417 1 14830 519 1 14312 5 1179373 1 1 8200 3.1 255 1960 1 8200 3.1 255 1 13810 541 1 14584 5 1179574 7 7 15561 3.8 587 1957 1 15740 3.5 548 1 16290 644 1 14519 5 1179575 2 2 12845 3.6 463 1958 1 15250 3.8 594 6 13773 533 6 14372 5 1179729 2 3 17568 3.7 641 1958 1 15080 3.9 594 1179575 3 3 11373 3.5 403 1959 2 18120 3.7 660 2 13865 515 2 14176 5 1179895 3 3 11373 3.5 403 1959 2 11730 3.5 409 2 11510 424 2 12012 4 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12233 463 17 11856 4 1957 13 10662 3.9 413 15 12075 463 13 11970 4	1170480) 1	2	14095	3.6	506						1					535 487
1960 1 11840 3.5 417 1 14850 519 1 14312 5 1179373 1 1 8200 3.1 255 1960 1 8200 3.1 255 1 13810 541 1 14584 5 1179574 7 7 15561 3.8 587 1957 1 15740 3.5 548 1 16290 644 1 14519 5 1179575 2 2 12845 3.6 463 1958 1 15250 3.9 594 1179729 2 3 17568 3.7 641 1958 1 15080 3.9 595 1179729 3 3 17568 3.7 641 1958 1 15080 3.9 595 1179895 3 3 11373 3.5 403 1959 2 11730 3.5 409 2 11510 424 2 12012 4 1179895 3 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12253 463 17 118514 4 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12253 463 17 118514 4 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12253 463 17 118514 4 11957 13 10662 3.9 413 15 12095 463 13 11970 4	1170910) 11	13	13127	3.7	490	1959	10	12981	3.8	489	10	12613	483	10	12881	525 489 535
1179574 7 7 15561 3.8 587 1957 1 15740 3.5 548 1 16290 644 1 14519 5 1179575 2 2 12845 3.6 463 1958 1 15250 3.9 594 1179575 2 2 12845 3.6 463 1958 1 15250 3.9 594 1959 1 10440 3.2 332 1 8960 360 1 9134 3 1179729 2 3 17568 3.7 641 1958 1 15080 3.9 595 1 14440 543 1 14257 5 1959 2 18120 3.7 660 2 13685 515 2 14176 5 1179895 3 3 11373 3.5 403 1959 2 11730 3.5 409 2 11510 424 2 12012 4 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12233 463 17 11856 4 1957 13 10662 3.9 413 15 12695 463 13 11970 4	1175467	1	2	10395	3.6	370											455 532
1959 6 15532 3.8 594 6 137/3 533 6 14572 5 1179575 2 2 12845 3.6 463 1958 1 15250 3.9 594 1179729 2 3 17568 3.7 641 1958 1 15080 3.9 595 1 14440 543 1 14257 5 1179895 3 3 113/3 3.5 403 1959 2 18120 3.7 660 2 13665 515 2 14176 5 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12233 463 17 11854 4 1957 13 10662 3.9 413 15 12695 463 13 11970 4 1958 25 13094 3.8 501 21 12972 486 18 13790 4	1179373	3 1	1	8200	3.1	255	1960	1	8200	3.1	255	1	13810	541	1	14584	545
1959 1 10440 3.2 332 1 8960 360 1 9134 3 1179729 2 3 17568 5.7 641 1958 1 15080 3.9 595 1 14440 543 1 14257 5 1959 2 18120 3.7 660 2 13685 515 2 14176 5 1179895 3 3 11373 3.5 403 1959 2 11730 3.5 409 2 11510 424 2 12012 4 1184353 69 94 12101 3.8 461 1956 22 11012 5.7 406 20 12253 465 17 11858 4 1957 13 10662 3.9 413 15 12695 463 13 11970 4 1958 25 13094 3.8 501 21 12972 486 18 13704 4	1179574	7	7	15561	3.8	587											592 527
1959 2 18120 3.7 660 2 13665 515 2 14176 5 1179895 3 3 11373 3.5 403 1959 2 11730 3.5 409 2 11510 424 2 12012 4 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12233 463 17 11856 4 1957 13 10662 3.9 413 13 12695 463 13 11970 4 1958 25 13094 3.8 501 21 12972 486 18 13790 4	1179575	5 2	2	12845	3.6	463						ı	3960	360	1	9134	326
1960 1 10660 3.7 390 1 9950 378 1 13374 5 1184353 69 94 12101 3.8 461 1956 22 11012 3.7 406 20 12233 463 17 1185d 4 1957 13 10662 3.9 413 13 12695 463 13 11970 4 1958 25 13094 3.8 501 21 12972 486 18 13204 4	1179729	2	3	17568	3.7	641											562 525
1957 13 10662 3.9 413 13 12695 463 13 11970 4 1958 25 13094 3.8 501 21 12972 486 18 13204 4	1179895	j 3	3	11373	3.5	403											448 510
1959 30 12920 3.9 499 30 13422 492 29 15406 4	1184353	3 69	94	12101	3.8	461	1957	13	10662 13094	3.9 3.8	413 501	13	12695 129 7 2	463 486	13	11970	438 489

TABLE 15.--DAUGHTER-AVERAJE OF SIRES IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

RECORD AVERAGE BY SIRE BY FRESHENING YEAR DAUGHTER AVERAGE BY SIRE SOD-DAY CONTLMP. AV. YLARLY HERO AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. L3. LB. NO. LB. L6. SIRE UAUGHTERS RECORDS MILK TEST FAT FRESH RECUROS MILK TEST FAT NO. NO. NO. YEAR NU. LB. PCI. LB-HOLSTEIN 3.7 11B7680 3.6 3.6 5.9 3.4 3.7 3.7 13×30 14405 3.5 110/779 ì 4-6 3.6 30 a 3.5 3.5 3.8 3.8 12795 12714 3.8 οl 3.0 14 1 14 3.5 3.2 13,70 1959 3.8 3.8 16742 3.8 Lusho 134.20 4.8 4 - 6 52.1 3. B 3.6 3.0 3.0 3.8 3.8 3.8 4.0 4.3 4.0 3.8 3.6 54.7 3.5 444 121690B 3.6 3.6 LOA 3.8 L 32 3.€ 4.0 3.8 3.8 3.7 4.0

3.4

4.1 485

3.8 756

3-5 446

4.0 514

1.9

3.9

3.8 641

55 I

8730 3.6

8730 3.6 312

14891 3.9 577

2 12885

3.8 756

3.5 446

4.0 514

3.9 4B0

3.8 511

CDNNECT I CUT

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	BY YEAR DAUGHTER				ROS FR		STATE ONL		BY SIR	E 8Y	FRESHENING	YEAR				
SIRE	DAUCHTERS	DECORDS.	W 11 v	TOOT	CAT				TEST		305-DAY (CONTEMP		YEARLY HE		
NO.	NO.	ND.		PCT.	FAT L8.	YEAR	RECORDS ND. JERS	L8.	PCT.	L8.	RECORDS ND.	L8.		RECORDS NO.		L£.
34243	8 8	16	8255	5.0	410	1947	7 7	7669	5.2	396						
						1948 1949 1950 1951 1952 1953	1 3 2 1 1	10230 10493 9805 9810 5880 7100	4.5 4.5 4.7 4.9 4.1	456 467 462 479 242 338						
36 13 73	2 3	6	8135	5• I	409	1947 1950 1951 1952	2 1 2 1	6985 8360 8635 9210	5.6 4.9 4.8 4.8	391 408 412 439						
36601	5 3	11	8664	5.0	435	1947 1948 1949 1951	7 2 1 1	9290 10040 12080 9300	5.2 4.9 5.1 4.7	486 489 616 437						
37751	7 2	3	5818	5.1	287	1947 1950	2 1	6965 4670	4.4 5.7	306 267						
37787	2 1	6	6413	5.5	354	1953 1954 1955	2 2 2	6550 7110 5580	5.6 5.6	348 399 315	1 1 1	8560 8680 7 490	467 487 420	1	8578 8208	463 453
38274	3 1	3	7320	5.6	401	1952 1953 1956		4620 8680 8660	6.2 5.4 5.2	286 467 449						
39491	5 1	2	7345	5.3	390	1953 1954	1	8440 6250	5.3 5.3	445 334						
39761	1 1	1	8910	5.5	486	1952	1	8910	5.5	486						
40079	9 1	2	7795	5.2	404	1947	2	7795	5.2	404						
40332	0 2	3	9813	5.1	501	1955 1956	1 2	9190 10080	5.4 5.1	493 511						
40436	5 I	3	9837	5.4	528	1947 1948	1 2	9350 10080	5.1 5.5	473 556						
40514	8 I	1	10340	5.6	570	1948	1	10340	5.0	576						
40797	1 4	11	9506	5.5	521	1952 1953 1954 1955 1956	1 3 2 3 2	7140 9137 10165 10433 9610	5.9 5.4 5.6 5.4 5.6	418 488 568 565 536						
41157	1 1	1	7500	5.4	405	1954	1	7500	5.4	405						
41484	4 3	10	8600	5.7	500	1952 1953 1954 1955 1956 1957 1958 1959	1 2 2 1 1 1 1 1	9840 9280 7650 11770 10780 11930 12790 11260	5.6 5.7 5.7 6.1 6.2 6.5	575 525 440 674 660 737 829 706	1 2 2 1 1 1 1	9460 8320 7630 10140 10250 10860 9850 9650	504 422 376 523 534 561 509 523	1 2 1 1 1	8829 7041 9472 9919 9984 10410 9374	471 372 501 517 538 564 516
43364	5 1	2	10490	4.9	517	1951 1952	1 I	9740 11240		488 545						
43687	2 1	2	8540	5.6	477	1955 1956	1	7830 9250	5.7 5.5	448 505	1	7190 7080	383 888	1	6976 7837	
4377 1	1 8	19	9228	5.1	477	1952 1954 1955 1956 1957 1958	1 5 4 4 1	9170 9532 8915 8495 8130 10090	5.6 5.0 5.2 5.0	389 527 449 443 414 568	2	9198 8985 9195 11830	509 487 506 629	4 2 2 2 2	9952 9211 8208 9865	501 505 457 545
43935	6 1	6	10365	5.2	534	1953 1954 1955 1956 1957 1958	1 1 1 1 1	9670 10670 9850 9990 12090 9920	5.2 5.2 4.8 5.1	519 554 514 480 618 517	1 1 1	8200 8630 8740 9560 8500 8230	394 467 469 514 459 437	1 1 1	8813 7892 8033 7172 9352 8927	464 467 367 476
44010	3 3	6	89/4	5.6	503	1958 1959 1960	1 1	8840 85 7 0 9250	5.6	500 477 583						
44110	7 4	7	7451	5.1	375	1953 1955 1956 1957 1958	2 1 1 1	5/85 11130 6730 12540 11550	4.9 5.4 5.1	289 549 362 634 534		8160	400			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	KECOROS NO.		TEST PCT.		FRESH YEAK	RECUROS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.	MILK		YEARLY HE KECOROS NO.		FAT
						1959	JÉR:	SEY 10890	4.5	522						
442491	¥ 2	3	8868	4.9	430	1954 1955	1 2	9240 8445	4.9	449	l I	9620 10600	509 565	1	9734 9211	510 505
44446	в 1	1	8610	4.9	418	1959	1	8610	4.9	418	1	7760	391	1	10835	525
44517	4 1	1	8150	4.9	40 I	1954	1	8150	4.9	401						
446991	0 1	2	9115	5.4	494	1952 1954	1	10060 8170	5.3 5.5	536 452						
447541	iş iş	9	8316	5.5	456	1954 1955 1956 1958	2 4 2 1	9395 8148 8665 8430	5.5 5.9 5.2 4.7	519 477 452 397	1	9030 8000	491 441	1	9734 9211	510 505
448028	3 2	6	9340	5.4	510	1954 1956 1957 1958 1959	1 1 1 2 1	6490 8190 9550 10430 5670	4.7 5.0 4.8 5.4 5.2	305 412 462 566 297	1 1 i 1	8740 6790 10160 8420 8130	391 403 542 461 431	1 1 1 1	6736 7249 9363 9407 8666	334 366 456 479 458
44895	1 2	5	9094	5.2	468	1952 1953 1954	2 2 1	8855 10030 7520	5.3 5.1 5.0	469 507 374						
454141	• 6	13	7192	5.3	385	1953 1954 1955 1956 1957 1959	3 1 3 3 2 1	7740 4860 5887 7323 8490 10370	5.6 5.5 5.0 5.4 5.3 4.9	435 266 298 396 445 505	1 2 2 1	7760 8030 9475 8200 7990	400 417 468 419 388	1 1 1 2	8818 8033 7172 8840 9461	436 407 307 445 436
4550 14	4 5	8	8361	5+1	428	1956 1957 1958 1959 1960	2 2 2 1 1	9515 9460 7130 10040 9300	5.1 5.0 4.9 4.5 4.6	470 476 348 450 428						
45567	6 1	3	9540	5.4	510	1955 1956 1957	1 1 1	9610 8920 10090	5.6 5.4 5.1	534 483 514	1	9330 8680 ₹230	585 444 514	1 1 1	8131 7717 8535	445 415 450
45694	7 1	1	7630	5.2	398	1959	1	7630	5.2	398	1	0د 84	442	I	8807	453
45725	8 7	14	7296	5.4	397	1952 1953 1954 1955 1956 1958 1959	3 2 2 3 1 1 2	7577 5530 7790 6383 9560 7680 7415	5.8 5.1 5.2 5.1 5.2 5.5 5.5	439 282 405 323 501 426 408	1 2 3 1	7080 8015 8027 8900	362 434 418 454	1 2 2 1 1	7085 7434 6976 7935 9461	366 384 364 390 486
46049	7 11	31	8783	5.6	491	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 5 7 7 1 3 2 2	11070 8987 10504 9081 8749 9500 8310 6295 10380	5.9 5.5 5.8 5.9 5.7 5.6 5.4 5.1	640 495 610 536 519 544 462 339 525	1 2 2 1 2 1	9330 9230 9200 9680 9245 7650 7320	504 536 511 505 530 494 410 367	1 2	7586 10737	403 521
46 193	5 1	2	10485	5.6	588	1953 1954	1	10270 10700	5.5	563	1	8090 0110	439	1	8578	403
46357	6 1	2	8335	5.8	486	1958 1959	1	7900 8770		450 521	1	9140	490	1	9429	514
46549.	3 1	1	7780	4.7	369	1955	1	7780	4.7	369						
46592	4 5	9	8318	5.9	492	1955 1956 1957 1958 1959	2 1 3 2 1	7755 6580 8340 9025 9050	6.1 5.7 6.4 5.9 5.6	470 378 331 539 504						
46596	6 I	3	9970	5.0	501	1953 1954 1956	 	9150 11960 8800	5.1 4.6 5.2	471 575 458						
46577	0 2	7	9172	5.5	497	1955 1956 1957 1958 1959	2 2 1 1	9755 8445 7300 9310 12250	5.6 5.4 5.4 5.4 5.4	539 451 392 505 665	1 1 1	9600 8470 9040 8430	512 438 480 445	1 1 1	8164 7140 9069 8666	424 363 474 455
46664	3 1	1	6410	4.2	2 7 2	1960	1	6410	4.2	272	1	9270	477	1	9701	525
46694	8 1	2	8630	5.2	431	1954	2	8630	5.2	431	2	7980	421	2	7641	3/2

TABLE 15.--DAUGHTEK-AVERAGE OF SIKLS IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

			DAY WAY			_	CC000		n v	C D.	CON CHICARIA	Maria.				
	OAUGHTER	AVERAGE	BY STA	RE		R	ECORD AVE	RAGE	BY SIR	£ BY	FRESHENING					
SIRE !	DAUGHTERS NO.	RECOROS NO.		FEST PCT.		FRESH	RECOROS NO.		TEST PCT.		RECORDS NO.	MILK	FAT	YEARLY HE RECORDS NO.		FAT
			200		200		BROWN S								200	
37565	1	3	10560	3.8	403	1952 1956 1957	1 1 1	14740 10330 6610	3.9 3.7 3.7	582 383 245	1 1 1	8920 11830 13170	342 464 542	1	11325 12 7 09	463 5∠0
39593	2	4	12165	4 - 4	526	1950 1951 1952	2 1 1	12640 9800 9470	4.3 4.4 5.2	540 436 492						
45417	11	14	10925	4.1	456	1954 1955 1956 1958 1959 1960	1 3 1 3 5	9920 6750 11220 9673 13582 14870	4.2	422 279 464 395 574 625	i 14 1	9910 10923 11690	441 460 560	1 4 1	11434 11290 13287	477 481 639
48672	1	7	10230	4.1	426	1952 1953 1954 1955 1956 1957 1958	1 1 1 1 1	15300 9090 10810 10520 8650 7970 9270	4.3	670 394 460 429 322 312 398						
50092	1	2	8670	3.5	306	1953 1955	1	8120 9220	3.5 3.5	286 326						
53913	2	2	11685	4.2	484	1959	2	11685	4.2	484	2	11350	502	2	11892	537
62573	1	1	14340	3.7	532	1957	ı	14340	3.7	532						
64505	1	3	10650	4.0	432	1953 1954 1956	1	15130 10450 6370	3.9	635 412 248						
65421	13	38	11768	4.0	475	1952 1953 1954 1955 1956 1957 1958 1959	1 4 3 5 7 4 7 6	12760 10913 9057 11644 10661 11470 13493 14107 15170	4.2 4.1 4.0 4.1 4.0 3.9	484 440 382 475 424 469 543 560 780	1 2 2 2 1 1 3	11770 9505 9795 11530 11600 11250 12573 11660	477 408 411 486 474 468 537 546	1 2 2 2 1 1 3	10998 10704 10399 11080 11020 11325 12273 13287	456 453 442 485 459 482 535 639
69978	1	2	10650	4.5	481	1958	2	10650	4.5	481	1	14060	579	1	12742	52 U
, 70410	2	2	12465	4.2	526	1959	2	12465	4.2	526	2	13045	589	1	13058	611
70747	39	61	11625	4.2	#8#	1954 1955 1956 1957 1958 1959 1960	1 6 8 11 12 20 3	11130 10252 12833 12138 12336 11810 9133	4.4 4.1 4.1 4.2 4.1	470 451 521 500 511 490 376	1 5 5 3 11	16990 11568 11898 12707 11465 13100	776 474 506 520 487 571	1 5 5 4 9	11761 11726 12744 11838 11492 11925	528 489 535 493 460 506
72896	łş	11	13633	4.5	605	1951 1953 1954 1957 1958 1959	1 1 1 1 1 1 1 1 1 2 1 1	10530 10520 10310 9170 13208 13705 15580	4.6 5.3 4.5	466 482 477 487 591 632 700	1	12140 13/90	566 604	1 2	12110 11723	
733 18	5	8	13283	4.3	561	1958 1959	ių L	13728 12593		556 565						
74062	1	1	7180	4.5	320	1959	1		4.5	320				1	12372	470
74937	2	2	10110	4.1	413	1953	2	10110	4.1	413						
76202	8	9	12006	4.5	544	1959 1960	7 2		4.5		5	12644 7830		5	11316 13287	
77870	1	3	7007	4.3	295	1955 1956 1957	1 1 1		4.0 4.3 4.5	392 311 181	1 1 1	8170 9690 6450	310 361 279	1	7957	292
82405	3	3	7490	4.1	307	1958 1959	1 2	6510 7980		262 330	1 2	4330 9105	169	1 2	8295 6633	308 438
86139	1	3	11543	4.1	474	1956 1957 1958	1 1	10260 13760 10610	4.1	418 567 438	1 1 1	12300 12720 11300	495 522 469	1	11325 12709 11859	463 520 488
87721	1	1	11600	4.2	483	1958	1	11600	4.2	483						
89612	21	40	9756	4.3	420	1952 1953 1954 1955	1 2 6 6	8888	4.1 4.5	395 391 395 386	1 1 3 4	9120 9140 10100 10858	369 393 439 471	1 3 3	9156 10675 11103	382 4/1 492

TABLE 13.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTER	AVERAGE	BY 511	RL		R	ELUKU AV.	RAGE S	Y 512	EBY	RESHENING	YLA				
STRE	DAUGHTERS			TEST		FRESH	RECORUS				Redurids	MILK	FAT	YEARLY HI	wIFk	E / 1
NÚ.	NO-	NO.	F8.	PCT.	LB-	YEAR	NU.	L8.	PCT.	LB.	٠0.	1.00	LB.	NO.	LB.	Lile
							DRUWN S	22143								
						1950	3	8640	4.1	358	1	11800	529	1	12884	500
						1957	5	10317	4.2	432	3	1001	416	3	11154	457
						1958	4	7820	4.5	334	2	8200	342	1	8295	303
						1959	1.1	11527	4.3	495	٥	3د 122	523	14	10824	401
						1960	1	5870	4.3	255				1	/140	313
89614	13	22	11289	4.3	484	1957	14	11210	4.1	460	1	11360	4/7	1	12/97	558
						1958	Y	10710	4.5	402	1	14350	58.1	1	12110	518
						1759	3	11985	4.3	১1৮	6	12808	550	5	1209)	52.1
						1460	1	7830	4.5	406	1	13750	705	1	13287	637
91234	i I	1	8060	3.9	311	1955	1	8060	3.9	317						
91556	1	1	3320	4.3	143	1959	1	3320	4.0	143	1	3940	171			
95771	6	10	11443	4.5	519	1958	,	10930	4.7	509	1	14210	605			
						1959	7	11276		506	5	12408	551	14	11805	500
						1960	1	13250	4.9	ندده	1	14360	594			
99438	3 2	3	11400	4.5	508	1958	1	12680	4.2	536	1	9420	424	1	11434	477
						1959	2	11790	4.0	535	2	12755	549	1	12197	5, 3
105570) 1	4	13590	4 - 4	605	1956	1	11370	3.7	423	1	12090	492	1	11816	499
						1757	1	1347C	4.4	299	1	12510	533	1	11227	461
						1958	1	14650	4.0	578	1	13970	618	1	12132	520
						1960	1	14670	4 - 7	113	1	13660	647	1	13267	6.9
106905	7	10	10915	4.1	443	1957	1	5670	3.7	223	1	4000	233	1	1957	247
						1950	5	10374	4.2	428	4	10660	435	4	10699	432
						1959	14	11715	4.2	497	∠	12680	543	1	7576	3 5 0
113594	1	1	9220	4.7	432	1959	1	9220	4.7	452	1	13530	637	1	12699	500
117125) 1	1	7130	4.7	333	1958	1	7130	4.7	333						
120448	3 1	2	13010	4.2	549	1959	2	13010	4.2	549	1	13660	583	1	12088	519
122/06	3	3	9110	4.3	390	1959	1	8220	4.3	350				1	10780	4:7
						1960	2		4.5					2	10960	444

10/

TABLE IS.---OAUGHTUR-A/LRAGE OF SIRES IN SERVICE IN ARTIFI IAL BREEDING ORGANIZATIONS--GROUPED BY EREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTLE AVERAGE BY SIRE

SIRL NO.	DAUGHTERS NO.	RECOROS 40.		TEST PCT.	FAI LB.	FRESH YEAR	RECURDS NO.		TEST PCT.		305-DAY C RECORUS NO.	ONTEMP MILK L3.	FAT	YEARLY HE RECORDS NO.	MILK	
							M. SHOR	THORN								
6246	9 1					1958	1	7070	4.4	311	1	7100	280	1	7249	241
248694	7 1	1	3860	4.4	172	1957	1	3660	4.4	172	1	6700	344	1	7772	366

NLW YORK

TABLE 15.--0AUGHTER-AZERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SINE BY FRESHENING YEAR

SIRL NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.				FAT	YEARLY HE RECOROS NO.		FAT
							AYRSI	HIRE								
46522	. 2	7	8148	3.9	316	1948 1949 1950 1952 1953 1955 1956	 	6880 8690 7570 9140 11230 9480 10180	4.2 3.8 3.6 3.7 3.5 3.5 3.5	290 339 291 338 392 329 359						
48082	1	4	10263	3.9	400	1947 1949 1950 1951	1 1 1	9340 12260 10040 9410	3.9 3.9 3.6 4.0	36∠ 473 386 377						
51943	1	1	11000	3.2	357	1949	1	11000	3.2	357						
5 38 33	3	9	9558	4 + 0	38/	1949 1950 1951 1952 1953 1954	1 3 1 1 2		4.0 3.9 3.7 4.0 4.0	473 380 477 325 399 403						
53909	25	60	8616	3.9	33/	1948 1949 1950 1951 1952 1953 1954 1955	6 12 12 7 4 3	9600	3.9 3.9 3.9 3.9 3.7 3.8	333 366 423 362 373 317 331 384 333						
5 50 33	2	8	8744	4.2	360	1950 1951 1952 1953 1955 1958	1 1 2 2 1 1		3.8 3.7 4.5 4.2 4.5	459 320 349 311 328 446						
56337	3	i,	7962	4.2	328	1949 1950	3 1	356 7 6480	4.1 4.5	349 291						
5 73 38	283	670	9723	3.9	370	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 31 50 94 142 151 138 107 73 56 20	10664 9954 10209 10244 9754 9828 10352 10164 10464 9587		296 406 386 391 401 378 377 396 389 392 369 387 381	4 8 12	10088 9026 9135 9556 11010	466 447 412 411 368 366 390	13 15 12 7 5	9538 9300 9909 9410 10183 10235	
59047	1	Ц	13378	3.6	482	1947 1948 1949 1950	1 1 1	10680 14550 13750 14530	3.5 3.5 3.6 3.7	377 506 502 543						
\$95.15	1	3	7673	4 + 0	307	1952 1953 1955	1 1 1	6610 7900 8510	4.2 4.1 3.7	281 327 312						
60920	75	219	8542	4-1	349	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	5 34 45 51 34 22 14 9 3 2	8726 9524 10533	4.1 4.0 4.0 3.9 4.1	340 394	3	10173 9960 10107 10727 10960 10800 9740	393 396 429 435	3 4 2	8865 9478 9952	365
61046	1	3	7935	3.8	303	1952 1953 1 9 54	1 1 1	8340 7080 8440		342 255 313						
61001	26	72	9137	3.9	359	1948 1949 1950 1951 1952 1953 1954	2 15 18 14 9 7 2	9747 9661 9190	4.0 4.0 3.9 3.9 3.3	365 378 357 386						

NEW YURK

TABLE 15.---OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORJANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	DAGGINER	ATEMADE	0. 51.	***			EGORIA AT	LICAGE C				LAN				
	DAUGHTERS NO.		MILK LB.	TLST PCT.	FAI L8.	FRESH YEAR	RECURDS NG.				305-DAY (RECGRUS NO.		FAT	YEARLY HE RECUROS NO.		FAT
						1955 1956 1957 1958	1	HIRE 11315 12640 9370 10620	4.1		1	15460	691			
61498	B 23	82	¥16¥	4.0	364	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	10 18 15 13 8 5 4 5	8642 9533	4.0 4.0 4.1 3.9 3.6 3.7 4.5		1	12470 10790 11820 10540	499 422 430 405	1 2	10159 9112 9707 10976	377
61986	6 1	7	129∠0	4.1	520	1948 1949 1950 1951 1953 1954		10760 13480 14870 13750 13200 10760 13620								
6223	3 I	Ħ	11110	4.1	457	1954 1955 1956 1957	1 1 1	12330 11380 11590 9140	3-0	544 491 444 349						
6261	3 1	2	6090	3.9	239	1953 1954	1	5990 6190	3.9 3.9	234 245						
62636	6 150	293	9705	4.1	394	1954 1955 1956 1957 1958 1959	27 60 66 52 48 35	9429 9673 10242 9722 9882 10579 9786		389 404 422 397 395 423 394	اة 18 34 1د	9910 10639 10876 10571 10216 10363 10245	441 425	31 29	9836 9516 10416 10356 10636 10957	386 421 412 429
63144	l4 I	3	11197	4.3	480	1951 1952 1953) 	12050 12130 9410	4.3	507 527 405						
6314	7 18	Łį Lą	11045	4.2	457	1953 1954 1955 1956 1957 1958 1957	2 5 8 8 6	12620 11186 11684 11241 10976 10443	4.1 4.1 3.9 4.1	538 473 481 457 424 431 430	2	8390 10880 9140 11373 11830 10927	441 359 438 4 7 4	2 2 4	10846 10068 10906 11623 11153	434 445 462
6 34 0	6 1	2	9305	4.0	369	1950 1957	1		4-2	303 375						
63417	7 84	230	868	4.0	354	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	12 22 37 39 39 29 17 16 8 9	8965 8948	4.1 4.0 4.1 4.0 3.9 3.9 4.2 3.9	374 360 348 371 303 398 379 371 440 414	2 2 4 2 4 4	7060 10260 9840 10145 9175	416 376 432 411 414 375 402	4 4 5	10187 10350 9876 10266 10535	413 396 410
63420	6 5	11	9177	4.0	368	1952 1953 1954 1955 1956 1957 1958	1 2 2 1 1 1 2	9585 8680 11790 11310 9990	4.2 4.6 4.1 4.0	393 411 324 499 519 410 531 347	!	6520 8a70	268 341	1	7685 7183	307 234
6487	3 1	ž,	83/0	4.0	328	1951 1952 1953 1954	1 1 1	999U 6930	3.9 3.9 4.1	354 385 268 305						
6530	6 18	73	10991	4.3	477	1948 1949 1959 1951 1952 1953 1954 1955 1956	11 12 11 7 5	12397 10680	4.4 4.3 4.5 4.2 4.0 4.2 4.1	363 500 515 491 429 419 478 517 467						
6147	9 139	315	9004	4.0	354	1952 1953 1954 1955 1956	11 42 68 67 55	8536 8914 9435	4.0 4.0 4.0 3.9 3.9	377 336 350 367 357	1 3 10 9 12	7270 8933 9956 9742 9662	372 410 394	11	7279 9556	

4.0

195B

3. b

4.0 3.8

776B

1 11060 482

1 10824 464

TABLE 15.--DAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATION5.--GROUPED BY EREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

186

DAUGHTER AVERAGE BY SIRE

SIRL NO.	DAUGHTERS NO.	KĖCOROS NO.		TLST PCT.	FAT L8.	FRESH	RLEOROS NO.		TEST PCT.	FAT L8.	SOS-DAY (RECURUS NO.			YEARLY H	MILK	
						1959	AYKSI 4	41RE 9305	4 - 1	3d3	3	10380	435	3	10962	454
72257	1	2	8285	3.6	298	1956 1957	1 1	6890 9680	3.5 3.6	243 353						
72541	1	1	9040	3.2	288	1956	1	9040	3.2	288						
72686	5 22	43	9465	4.1	391	1952 1953 1954 1955 1956 1957 1958 1959	5 7 7 8 4 2 7 5	10430 9853 8600 9835 9680 9620 9720 11123	4.2 4.3 4.2 4.2 4.5 3.9 3.8	437 412 371 414 412 428 383 421	1 1 1 1 4 3	12070 12250 10130 10350 10670 12620	537 530 440 444 415	1 1 4 3	11227 16431 10611 11797	441
72906) 1	2	10965	3.8	418	1954 1955	1	11050 10380	3.8 3.8	4∠3 413						
73293	3 4	7	7 348	4.1	300	1952 1953 1954 1955	1 2 3 1	7600 7190 6897 9600	3.7 4.1 4.2 4.1	290 295 257 406						
7 3684	3	6	11454	4.4	503	1953 1954 1955 1956 1959	1 1 2 1	11900 7110 12280 11440 14250	3.9 4.0 4.3 5.0 4.1	466 235 522 576 591	1	9040 11460	353 435	1	11292	47.
74021	- -	7	10443	4.0	417	1957 1958 1959 1960	2 3 1	10250 10925 10816 11280	3.7 4.2 4.3	376 403 454 481	1 2 1	10160 10265 10530	415 422 443	3	10951 10497	447 451
74136	25	89	9313	4.0	371	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 17 18 17 12 10 4 4 1 1	10070 9430 9279 9771 9575 8926 10075 10080 10120 10630 9520 9560	3.7 4.1 4.0 4.0 4.1 3.9 4.0 4.1 3.3 4.0	397 352 370 395 306 365 365 496 401 410 354 376 378	1 2 2 2 2 1 1 1	11000 9395 10125 9280 11465 10260 11450 11050 9390 8510	439 407 436 397 465 426 499 413 388 356	2 1 1 1	10377 10344 11303 9221 8480	440 425 460 356 347
74223	8 81	211	9012	4.3	361	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 8 29 33 35 24 22 28 18 8 2 2	8855 9755 9324 9676 9272 9457 9519 9204 10532 10608 7270 6500	4.1 4.4 4.2 4.2 4.4 4.1 4.0 4.0	348 428 404 417 391 401 415 394 426 422 289 258	1 1 3 5 5 2 1	10870 9600 10830 9843 10560 9492 8650 8580	446 334 498 376 422 393 357 360	2 4 6 5 2 2	10056 9264 9460 10146 8093 8039	395 373 378 399 335 335
74434	62	94	9340	4 - 0	377	1954 1955 1956 1957 1958 1959 1960	10 18 27 19 10 8 2	9104 9665 9439 9152 10324 9775 10905	4.1 4.2 4.0 4.1 4.0 3.8 3.7	3/1 400 383 377 413 367 420	2 3 5 6 6 7 2	8725 11157 10056 8658 10035 9583 11960	370 446 395 346 389 383 440	3 5 7 6 7 2	9312 9487 8642 9837 9876 11336	363 378 341 361 309 435
74535) 173	236	9777	4.1	402	1955 1956 1957 1958 1959 1960	2 30 47 68 74 15	6480 9795 9647 10053 9963 9342	4 · 4 4 · 1 4 · 1 4 · 1 4 · 1 4 · 0	372 400 394 413 410 380	6 10 56 73 13	10777 10257 10624 10418 10455	428 416 435 422 423	7 12 50 67 12	10403 10267 10628 10547 11254	419 413 426 470 448
74911	2	3	8680	4.2	361	1956 1957	2 1	8520 9420	4.∠ 3.8	356 357	1	3590 10030	360 426	1	10965	463
75717	7 5	13	9049	4.3	384	1950 1951 1952 1953 1954	5 3 3 1 1	9884 8517 9567 8370 7440	4.3 4.1 3.0 3.9	430 359 390 318 288						
76613	3 5	10	9180	4.3	397	1953 1954 1955 1956 1957 1959	2 3 2 1 1	7770 8887 11905 7620 5220 12030	4.1 4.2 4.1 4.0 4.1	318 371 485 304 214 586	1	12920	495			
77871	+ 1	14	9210	4.1	376	1955 1956 1957	1 1 1	7820 9110 8650	4.1 4.1 3.9	317 370 348	1 1 1	10140 9280 7910	400 366 348			

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BRELU, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE					CURD AVI		EY SIR	£ 8Y	FRESHENING	YEAK				
SIRE NO.	OAUGHTERS NO.	RECORDS		TEST			RECORDS				RECURDS	MILK	FAT	YEARLY HE RECORDS	MILK	FAT
NO.	NO.	140 .	LD.	PCT.		YEAR	NO. AYKSI	HIRE		L8.	NO.		L8.	NO.		Le.
7/942	2 2	4	10605	4.1	432	1958		11060		469	1	0006	392	1	8775	360
18927	′ 277	484	95/1	4.0	385	1957 1952 1953 1954 1955 1956 1957 1958	2 26 52 68 99 88 66	9493 9648 9543 9886 9195 9769 10127	4.0 4.1 4.0 4.0 4.0 4.0 4.0	356 394 362 399 375 392 404	5 გ	10890 11112 10094 10404 9594 10187		9 10 16 42	9448 9675 9929 10253	356 393 397 408
						1959 1960	71 11	10164 9960	4.0	403	67 11	10449 10454	417 419	54 10	10492	415 418
79374	1	1	12810	3.7	479	1959	1	12810	3.1	479	1	11150	443	1	10791	427
80379) 1	2	9635	3.8	359	1958 1959	1	9100 10170		346 571	1	81o0 9780	346 385	1	8589	364
80587	11	32	9509	4.3	404	1951 1952 1953 1954 1955 1956	4 9 1 6 2 1	10668 9478 9531 9733 10495 12600 6880	4.3 4.3 4.3 4.1 4.3 3.7	438 407 420 418 434 536 267	1	10100	418) I	7695 8121	303 366
81145	65	137	9338	4.1	379	1958	2	9235 10748		363	2	9255	36 8	2	9718	302
						1954 1955 1956 1957 1958 1959 1960	32 25 24 24 13 12 2	8945 9129 9134 9421 9847 9891 8825	4.1 4.2 4.2 4.0 3.9 4.0 4.2	369 381 381 381 379 395 368	2 4 9 10 10	10485 10458 9440 10223 10347 10791 11940	400 421 393 409 412 420 454	4 5 7 8 8	9785 8805 9701 10102 10282 10235	409 371 401 408 407 419
83477	2	6	11628	3.8	433	1955 1956 1957 1958	2 2 1 1	11695 11885 12930 10930		452 438 505 437	2 2 1 1	13370 12535 13440 15070	509 488 554 694	1	10397 10192	417 392
84978	3 87	151	9120	4.3	391	1953 1954 1955 1956 1957 1958 1959	2 19 35 38 24 19 10 4	10095 8349 9121 9019 9072 9776 10585 9758	4.2 4.3 4.4 4.4 4.3 4.3 4.3	419 361 400 392 384 415 449 382	1 2 5 10 10 15 10 3	13430 11330 9788 10242 10312 10081 10433 10633	500 471 400 414 404 396 426 400	5 10 8 15 9 3	9293 9574 9617 10181 10543 10094	337 370 369 465 410 385
85982	2 79	169	8917	4.2	370	1951 1952 1953 1954 1955 1956 1957 1958 1959	13 30 31 20 16 13 21 15	9649 9010 8611 8909 9538 8334 8871 9305 9124 7560	4.2 3.9	399 382 357 354 385 330 372 381 374 304	1 2 2 2 2 1 4 8 9	9420 9945 9775 16760 10280 7500 9875 9903 9531 9020	388 418 396 476 441 328 425 402 390 379	2 1 4 7 8	8862 9003 10102 10260 9783 10726	370 389 426 417 375 451
86390	5	6	8900	4.0	359	1958 1959 1960	2 2 2	8090 9700 8655	4.1 4.1 4.0	331 389 347	2 2 1	10325 9870 10640	425 406 452		10666 10715 10453	
86779	5	7	9421	3.9	3 6 8	1956 1957 1958 1959 1960	1 5 1 1	11820 8903 9256 9840 11310	4.0 3.8 3.7 4.3 4.2	477 335 346 425 474	1 3 1 1	9340 10153 10710 9900 9830	407 382 455 385 391	1 1 1 1	10061 9734 11107 11129 12023	398 390 449 431
87503	3 169	303	10 190	3.9	393	1951 1952 1953 1954 1955 1956 1957 1958 1959	8 21 37 23 24 37 38 48 48	11304 10453 10096 9917 10461 9521 10154 10838 10799 10359	3.9 3.8 3.8 3.8 4.0 3.9	447 406 401 384 402 361 388 426 422 405	1 5 3 4 11 37 47	8270 8828 9720 9428 9663 10632 9951 10210 10118	315 351 373 392 389 392 396 409 389	3 2 10 32 43 16	8996 9505 9789 9995 10127	354 371 335 398 403 457
8 / 5 04	4 46	123	94.5	5.8	358	1951 1952 1953 1954 1955 1956 1957 1958 1959	6 20 31 23 19 12 5 3	10063 7868 9780 9236 10719 10271 9908 10233 10660	3.8 3.7 3.7 3.6 3.5	384 374 379 343 393 369 351 349 359	1 1 2 2 2 2 1 1	6930 6750 9920 10a10 11680 10755 11670 11620	273 269 360 400 437 406 429 415	1 2 2 1 1	9581 10105 9865 10624 12164	371 383 379 392 437
8935	3 97	167	10491	4.0	420	1952 1953 1954 1955 1956	2 10 12 16 22	12305 11752 11901 11603 10264		545 484 469 468 410	2 3 3 6	12360 11860 12813 11637	506 458 508 475	3 6	11107 10969	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	OAUGHTER	AVERAGL	BY SI	₹ <u>L</u>		R	ECORD AV	ERAGE I	BY SIR	F 84	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAI L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-0AY RECUROS NO.			YEARLY H RECORUS NO.	MILK	
						1957 1958 1959 1960	AYR SI 22 24 50 9	10990 10163 10479 9436		435 402 419 371	8 17 46 8	11654 10648 10493 10130	456 431 425 401	7 18 40 9	11415 10578 10934 10601	464 430 437 416
89376	5 3	5	10637	4.4	463	1956 1957 1958 1960	1 1 2 1	8200 7960 11940 12250	4.7 4.7 4.2 4.5	387 376 501 546	2	11530 11900	483 500	1	11369 11892	474 511
91668	3 1	1	11400	4.1	471	1956	1	11400	4.1	471						
9 18 83	8	8	9135	4.3	387	1959 1960	7	9111 9300	4.2	394	7	11230 9820	463 412	6	11512	475
9254	3 1	1	8450	3.6	308	1959	1	8450	3.6	308	1	7350	293			
93233	3 1	2	8785	4.7	417	1958 1959	1	8820 8 75 0	4.8	427 406	1 1	9330 9100	366 361	1	8393	3 < 7
94066	5 29	53	8163	4.1	332	1953 1954 1955 1956 1957 1958 1959	9 18 10 7 6 1	8246 8394 9654 8807 9477 4800 8980 8590	4.3 4.1 4.0 3.9 3.8 3.1 4.0 5.5	354 343 391 342 352 151 356 300	2 2 2 3 1 1	10425 9280 7960 8433 8800 10000 9360	469 383 330 342 306 417 358	2 2 2 1 1	7254 8240 9898 9396 9450 9734	311 338 404 349 391 388
94239	36	74	8336	4.2	345	1952 1953 1954 1955 1956 1957	5 22 19 12 6 6	7540 8508 8836 8833 9045 9348 9483	4.2	314 348 366 368 366 371 369	2 2 3 4 4 2	10725 10150 9897 10065 9405 8945	433 386 368 387 366 354	4 5 3 2	9129 9583 9400 8742	366 382 372 353
94423	3 11	14	8898	4.2	373	1957 1958 1959	3 4 7	8157 9565 9119	4.1	327 396 588	2 3 7	8935 11117 10290	335 457 418	1 3 7	8720 10740 10338	379 435 421
94852	2 3	5	10252	4.2	429	1957 1958 1959	1 2 2	7970 11305 11480	4.4	333 492 462	2 2	9690 9930	416 413	2 2	10 19 2 98 6 5	435 435
95368	3 5	10	10121	3.8	385	1957 1958 1959 1960	1 2 5 2	10020 11825 10198 8500	3.9 3.8	361 464 390 309	1 2 5 2	9160 10225 9450 8955	343 427 380 349	2 5 2	10377 10098 10830	421 405 424
48:06	4 47	58	9444	4.4	410	1958 1959 1960	11 39 8	9151 9518 9370		391 411 409	10 38 6	10292 10667 9910	415 430 393	10 30 8	10225 11102 10771	404 449 431
9544.	3 15	27	11334	4.1	467	1956 1957 1958 1959 1960	3 1 11 11 1	10260 5720 12114 11569 11716	4.2	406 240 507 474 531	1116	7050 11581 11175	273 486 463	1 11 8 1	8884 11800 10828 10540	337 494 404 459
9555	7 20	23	9640	4.1	394	1957 1958 1959	3 7 13	10763 9254 9342	4.1 4.1 4.1	438 382 384	6 13	10748 10330	433 405	5 12	10455 10657	426 420
95808	3 1	2	11490	3.9	449	1959 1960	1	11830 11150		466 432	1	9900 11690	390 450	1	10682 11587	424 460
96526	5 2	3	9353	4 - 1	384	1957 1958 1959	1 1 1	8200 8230 10490	4.1 3.8 4.2	340 316 439	1	8190	324			
9830	7 13	13	10398	4.2	429	1959 1960	8 5	10285 105 7 4		428 432	8 5	10503 11262	42 l 44 l	6	9720 11358	
990 b	9 1	1	9200	4.0	366	1959	1	9200	4.0	366	1	11250	401			
9921	7 1	1	10500	4.0	416	1957	1	10500	4.0	416						
10152	7 117	137	10487	4.2	436	1957 1958 1959 1960	4 24 93 10	10938 10745 10537 10234	4.2			9450 10579 10524 10203	377 418 421 414	3 23 76 16	9080 10233 10673 11072	405 427
10260	0 32	49	9585	4.1	396	1954 1955 1956 1957 1958 1959	1 9 11 11 10 7	7220 8539 9702 10010 9935 10031	4.4 4.1 4.1	351 373 401 410 397 412	3 3 4 7 6	9113 8883 9830 9901 9148		2 2 4 5	9227 9603 9494 9775 10404	365 387 377 400 419
10260	1 31	43	9380	4 - 1	386	1955	6	9483	4.1	390						

TABLE 15.--UAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOINS ORGANIZATIONS--GROUPED BY BRECO, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

	OAUGHTERS			TEST		FRESH	RECORDS		TEST		RLCURUS	MILK	FAT	YLAKLY HE RECORDS	MILK	FAT
NO.	NU.	NO.	LB.	PCT.	LB.	YEAR	NO.	LB.	PCT.	LB.	ио.	Lis.	LB.	NO.	LB.	LB.
							AYRSE	HIRE								
						1956	18	9061	4.2	379	2	8920	345	2	10366	391
						1957	9	8652	4.1	352	3	9450	403	1	8557	332
						1958	5	10454	4 - 1	426	3	10797	429	3	11187	430
						1959	4	12015	4 - 1	490	4	10920	423	4 1	10718	423
						1960	1	10690	4.3	464	1	12270	481	'	1638ñ	412
102607	1	1	7850	4.4	345	1958	1	7850	4.4	345	1	10910	442			
102855	5 1	1	9880	3.8	376	1959	1	9880	3.8	376	1	9130	355	1	11314	443
103230) 1	1	9940	4.4	434	1959	1	9940	4 - 4	4 34	1	9900	412	1	10715	438
104768	3 4	4	10433	4.1	421	1959	2	11980	4.1	485	2	8970	350	2	10459	410
						1960	2	8885	4.1	357	2	9860	367	2	11249	4 2 1
105105	5 4	6	8792	4.2	380	1954		9780	4.3	419	1	9690	437			
10310.	•	ŭ	0.72	7 . 2.	3.50	1956	i	10520	4.3	450	i	10530	436	1	10704	427
						1957	2	7740	3.9	306	i	10710	404	i	10388	403
						1958	1	9370	4.5	405	1	11250	433	1	11707	433
						1959	1	10590	4.7	500€	1	14320	600			
105721	1 1	1	11970	4.4	525	1959	1	11970	4 - 4	523	1	11350	481			
100096	5 I	1	12160	4.0	487	1959	1	12160	4.0	487	1	9346	360	1	9123	359
107869	36	43	9723	4.2	403	1958	1.1	9436	4.1	367	11	10700	414	8	10430	409
						1959	29	10162	4.2	424	26	9861	401	23	10308	421
						1960	3	8773	4.1	303	3	7947	391	3	10105	404
108670) 2	2	5195	4.4	224	1958	1	3840	4.8	185						
	_	_				1959	i	6550	4.0	263	1	8540	337	1	9243	373
108935	5 54	75	9081	4.1	371	1956	3	8324	4.2	351	1	11390	533	1	11957	402
						1957	23	8923	4 - 1	362	7	9950	395	4	11159	436
						1958	25	9373	4 - 1	383	19	10325	414	19	10205	418
						1959	18	9664 12870	4.1 3.7	400	18	11060 8760	441 327	13 1	10909	431
						1960	1	12010	3.1	4 79		0100	324	•	11303	4/4
110758	64	75	9564	4.2	400	1957	. 1	6810	4.8	330	1	7800	330	.1	9407	404
						1958	15	9962	4.5	425	14 41	10719	432 419	14 35	10133	410
						1959 1960	41 18	10478 8374	4 - 2	435 343	16	10487	401	33 17	10722	424
						1700	10	0314	4.1	343	10	10170	401	' '	.0010	424
110402	2 1	2	10385	3.8	390	1958	1	11100	3.1	415	1	9950	420	1	10573	415
						1959	1	9670	3.€	364	1	9530	386	1	11369	445
112025	5 1	1	11510	4 - 1	471	1960	1	11510	4.1	471	1	11700	525	1	8360	358

TABLE 15.--OAUGHTEK-AVENAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

	UNUUNIER	ATEMADE	0. 31.				ECONO AV				TRESTIGNING TERM
SIRE NO.	OAUGHTERS NO.	RECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NO.	MILK L8.	TEST PCT.	FAT LB.	305-DAY CONT_MP. AV. YEARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LE. LE. NO. LE. LE.
							GUER	VSEY			
197360) 1	2	8075	4.8	381	1947	2	8075	4.8	36 I	
205987	7 1	3	9850	4.3	428	1949 1950 1952	1	9990 10320 9240		447 430 401	
209999) 14	46	7621	4.8	364	1947 1940 1949 1950 1951 1952 1953 1954	25 6 3 3 2 1 2 3	7330 9165 9087 10070 10045 9480 10605 8820 9630	4.8 4.7 4.5 4.8 5.1 4.0 4.3 4.4	349 430 414 480 517 458 461 386 405	
210468	3 22	57	7580	5.2	390	1947 1948 1949 1950 1951 1952 1953	30 8 6 3 1	7732 7150 7574 8082 8383 9610 8750	5.2 5.4 5.3 5.1 5.0 4.8	399 367 411 425 419 478 422	
21206	1	1	7230	5.0	359	1947	1	7230	5.0	359	
214202	2 3	10	10993	4.7	529	1947 1948 1949 1951 1952 1953 1954 1955	1 1 2 1 1 1 1	9760 11170 11545 8100 8350 7150 8030 7790 13270		400 490 478 401 367 324 344 321 727	
214348	3 4	9	8288	4.9	412	1947 1948 1950	6 2 1	7998 9855 10830	4.7 5.2 5.4	372 516 535	
216597	7 24	86	1976	4.8	37 8	1947 1948 1949 1950 1951 1952 1953 1954 1955	36 8 9 10 9 5 4 3 1	8033 8380 8737 8542 8754 8020 8186 7447 6960 7340	4.7 4.6 4.7 4.8 4.7	389 392 409 393 407 386 381 322 378 390	
216763	3 1	7	9851	4.8	471	1947 1948 1949 1951 1952	3 1 1 1	8630 8950 12600 12120 9400	4.9 4.7 4.8	444 439 595 578 351	
21862	1 1	3	11547	4.1	463	1947 1948 1950	 	6390 13230 15020	4.7 3.8 3.9	301 501 588	
21875	5 2	3	6983	4.6	314	1947	3	6600	4.7	504	
21960	i i	2	10035	4.4	439	1948 1950	1	9930 10140		431 446	
219946	5 7	19	8195	ł‡ . ł‡	360	1947 1948 1949 1950 1951 1952	6 4 4 2 2 1	8383 9198 5985	4.5 4.4 4.5 4.7 4.4	369 374 416 252 342 448	
226600) 11	30	8179	4.5	373	1947 1948 1949 1950 1951 1952 1954 1955	11 5 4 1 4 2 1 1 1	7660 8892 8428 8260 8040 7935 7980 7830 9640	4.6 4.6 4.8 4.9 4.6 4.6	363 404 389 400 395 360 368 337 443	
22 59 7	1 37	101	8415	4.7	391	1947 1948 1949 1950 1951 1952	4.3 14 15 3 7 5	9153 8785 8430 8228	4.6 4.5 4.6 4.5	39r 387 370	

TABLE 15. -- CAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY THEED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

6957 4.9 335

5.5

4.8

4.1

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY DREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE D	AUGHTERS RI						RECORDS NO.				305-UAY RECURU .40.	S MILK	YEARLY HE RECORDS NO.		FAIL
						1951 1952 1953 1955 1957 1958	GUERA 1 1 1 1 1	8450 6020 8140 7550 6380 5270	4.1 4.5	347 248 370 335 352 291	1	6380 7290	ì	o()66	363
249094	22	61	7447	4.6	345	1947 1948 1949 1950 1951 1952 1953 1954 1955	5 2 12 11 10 9 5 4 2	6612 9650 8337 7044 8759 8713 7712 9783 6610	4.7 4.7 4.5 4.6	293 457 403 330 403 391 349 427 505					
249227	2	2	9160	3.7	334	1954	Ż	9180	3.7	334					
250242	4	20	9365	5+1	453	1947 1948 1949 1950 1951 1952	9 2 3 2 1 2	10947 10006 11603 9600 8560 8700 7250		482 546 558 497 480 529					
250370	10	25	8293	4.8	394	1949 1950 1951 1952 1953 1954 1955	3 3 3 1 1	9010 7155 9287 8867 8557 10030 8436 8740	4.4 3.7 5.0	415 351 437 403 369 396 420 421					
251242	6	23	8769	4.7	410	1947 1948 1949 1950 1951 1952 1953	3 4 6 2 2 2 2	8094 8468 8862 8350 8065 8135 8145	4.8 5.3 5.0 4.7	379 407 422 439 397 379 371					
251248	i 4	59	7826	5.1	394	1947 1948 1949 1950 1951 1952 1953 1954 1955	9 7 6 4 4 5	7329 7188 7920 8245 9199 8645 9040 7915 8704 8530	5.2	365 367 394 438 464 450 423 388 421 395					
25 1445	4	7	7296	4.9	354	1947 1956	6	6 71 5 8 5 40	5.0 4.9	331 421					
253115	73	189	1920	4.8	378	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 7 34 47 35 24 20 10 5 5			337 349 404 389 393 393 373 375 372 407 435 350					
25 37 83	15	43	6842	5.0	343	1947 1948 1949 1950 1951 1952 1953 1954	10 7 2 3 2 1 1	7755 6876 8584 9235 8907 9905 8650 8480 7200	5.1 4.6 4.6 5.0 4.7 4.6 5.0 4.7	393 327 410 421 444 462 419 422 355					
2589 35	1	3	9497	5.8	551	1951 1952 1953	1 1 1	9510 9460 9520	5.0 6.0 5.9	328 366 360					
266090	ì	1	7370	5.8	424	1943	1	7370	5.8	424					
261884	1	1	10980	4.9	535	1950	1	10980	4.9	535					
262420	6	13	8204	4.9	399	1947 1948 1949	2 4	9115 9430 8698	4.7 5.0 4.7	426 470 421					

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BRELD,
BY YLAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRĒ NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-0AY CONTEMP. AV. YEARLY HERO AVERAGE RECORDS MILK FAI RECORDS MILK FAT NO. LE. EB. NO. EB. EG.
						1950 1951 1952 1954	GULRI 2 1 1 1	8680 6860 8510 7850	4. / 4. 4 4. 5 4. 8	407 303 387 377	
26242	1 1	1	7440	4.5	335	1948	1	7440	4.5	335	
262679	9 1	1	8610	4.8	416	1954	1	8610	4.0	416	
266583	3 2	8	7590	5.1	383	1953 1954 1955 1956 1957 1958 1959	1 1 1 1 2 1	7030 10500 10300 8580 8115 9660 8980	4.8 4.9 4.9 5.0 4.7	335 507 509 422 389 456 407	1 8970 405 1 10562 467
26834	7 27	75	7913	4.9	392	1947 1948 1949 1950 1951 1952 1953 1954 1955	13 10 13 13 10 4 3 5	7441 8680 8225 7833 8323 9113 7920 10332 9137 10260	4.8 5.0 5.2 5.0 5.0 4.9 4.9 4.9	358 434 424 390 414 444 391 510 434 489	
270988	8 3	3	7327	4.7	345	1956 1957	∠ 1	7390 7200	4 . E 4 . 4	358 320	
27333	1 4	4	7288	4.9	356	1953 1954 1956	2 1 1	7060 6170 8860	5.2 4.4 4.8	365 271 422	
27506	1 1	2	9490	5+1	482	1958 1959	1	8820 10160	4.9 5.2	436 52 7	
276883	3 5	20	8750	4.9	426	1947 1948 1949 1951 1953 1954 1955	6 4 3 1 1 1	8985 8065 7627 9220 11870 11660 11550 10000	5.0 5.1 4.7 5.0 5.2 4.7 4.6	445 408 359 457 618 544 530	
27805	5 2	7	8029	5.1	408	1953 1954 1955 1956	2 2 2 1	8495 7815 8135 6130	5.1 5.0 5.4 5.0	428 386 435 309	
27970	5 5	13	8049	4.9	393	1947 1948 1950 1951	9 2 1 1	8306 7200 11530 10650	5.0 5.0 4.9 4.6	416 355 570 486	
28069	1 5	9	7378	4.8	351	1951 1952 1953 1954	14 3 1 1	7838 7207 6550 6090	4.0 4.0 4.4 4.3	350 347 288 259	
281910	0 38	114	8289	4.9	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	8 20 20 12 10 11 9 8 9	9309	4.9 4.6 4.0 4.7	390 384 457 439 449 455 440 469 458 443	
28275	9 2	2	6330	4.9	309	1949	2	6330	4.7	309	
28310	9 3	3	7857	5.1	39 3	1951	ذ	7857			
28380	8 1	4	8290	5.2	428	1953 1954 1956 1957	 	8520	5.4 4.9 5.0		
285310	0 5	11	9334	4.6	422	1947 1948 1949 1950 1951 1952 1953 1954	1 2 1 1 1 2 2	11055 10030 9540 8590 7435 7535	4.6 5.0 5.0	469 473 438 433 368 369	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECHING ORGANIZATIONS--GROUPED BY EXCEU,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

	IRE	DAUGHJERS NO.	RECORDS ND.		IEST PCT.	FAT LB.	FRESH YEAR	RECURDS NO.		TLST PCT.	FAT Lb.	JOS-DAY (RECORDS NO.		FAT	YEARLY HE RECORUS NO.		FAT
								SUER	1SEY								
28	36688	3 8	91	8633	4.9	424	1948 1949 1950 1951 1952 1953	1 3 5 3 3 1 2	6590 9647 9222 8903 8653 7340 8910	4.0 4.7 5.2 5.2 5.7 5.7	316 473 430 470 451 416 509						
28	37312	2 24	61	7437	4.9	361	1949 1950 1951 1952 1953 1954 1955 1956	1 7 6 11 7 9 4 2	10/30 6930 /144 6712 7335 /400 8388 8/38 5435	4.9 5.1 4.9 5.1 4.0 5.0 4.9 5.1	457 347 348 342 356 370 406 427 253						
28	37967	7 273	726	8/04	4.8	417	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	7 40 52 73 85 98 100 109 87 43 23 7	8530 8652 8585 9019 8943 9261 9125 8825 8825 897 9379 9518 9489	4.7 4.9 4.9 4.9 4.6 4.6 4.7 4.7 4.7	401 421 419 439 429 448 436 422 427 439 448 445	1 2 5 7 11 11 15 13	9410 8695 8718 8364 9306 9386 9121 9605 9603 9673 9410	499 433 423 450 471 456 431 421 431 4411	12 12 12 13 5	8889 9151 9341 9422 9165	4, } 44 450 442 455
28	36095	. 17	159	7340	4.8	354	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 4 19 16 23 32 27 18 8 8	5480 8376 (131 7621 7277 (7/5 7656 8253 9064 8129 7313	5.6 4.7 4.9 4.9 4.8 4.9 4.9 4.9 4.9	307 391 348 370 351 372 371 398 434 385 327	1 1	/800 7670		1	7859 7205 7532	385 343 302
2	36/8	3 2	6	8490	4.9	422	1952 1953 1955 1956	2 2 1 1	8550 7690 10670 11150	4.8 4.0 5.7 5.4	410 356 o11 600						
28	89241	+ 1	1	7020	4.6	322	1954	1	1020	4.6	32 z						
28	8953	1 179	455	8007	4.9	394	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	9 30 68 93 90 65 43 32 11 7	8633 7951 8225 8106 8195 8283 8324 8059 8305 8201 6590	5.0 5.0 5.0 4.9 5.0 4.9 4.8 4.9 4.9	427 399 410 395 406 415 409 396 398 400 325	2 4 3 4 7 16 7 7	8300 8830 7550 8533 9289 9105 8036 8596 9780	427 428 375 414 450 411 381 424 471	3 6 10 4 6	9171 8869 9017 9314 9129 9559	441 418 415 431 440 472
21	8986.	3 200	455	7398	5.1	373	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	17 8 25 40 62 66 62 56 25 15	7106 7864 6946 7215 7443 8062 7726 7670 7865 8215 7265 8822 8736	5.2	567 599 512 570 517 404 589 386 594 410 549 414 422	1 4 4 3 3 3 6	11060 10370 8090 8763 8453 8367 8270 8931		3 3 3 2 5	9229 8644 9359 8213 9612	441 406 413 411 465
2	920 15	o 1	5	9502	J+-	507	1947 1948 1949 1953	1 1 1	9310 10280 12120 7990	5.4 5.2 4.9 5.2	497 536 594 412						
2'	9356	7 13	33	8242	0.0	411	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	4 5 4 2 1 1 2	7135 8192 8165 8150 9636 7745 7930 6840 8980 8845 7500	5.0 5.0 5.0 5.0 5.0 4.9 4.0 5.1 4.7 5.2 4.7	372 403 407 414 402 477 371 307 424 462 341	ı	7900	392	1	8567	4/3
2	9400	b 1	1	7620	4.9	37°	1953	ı	7620	4.9	375						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAUGHTER	AVERAGE	8Y S11	RE		R	ECURU AV	ERAGE E	Y 51K	E 8Y	FRESHLINING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.			FAT L8.	FRESH YEAR	KECORUS NO.		TEST PCT.	FAT LB.	SOS-UAY C RECORUS		FAT	YEARLY HI RECORDS NO.		FAI
							GULR	NSEY								
29 4 494	9 21	67	8163	4.6	373	1947 1948 1949 1950 1951 1952 1953 1954	13 10 14 9 9 6 3 2	7390 7346 9056 8350 8901 9952 8270 9045	4.6 4.4 4.7 4.8 4.6 4.0 4.0	337 340 404 394 427 455 378 409 415						
29475	o I	6	9968	4.B	478	1952 1954 1955 1956 1957 1958	1 1 1 1	8180 11450 13140 6760 9980 6300	5.6 4.9 4.6 4.9 4.7	462 565 607 427 466 545						
297876	5 2	2	6335	5.0	312	1952 1954	1	7550 5120	4 • <i>(</i> 5 • J	352 271						
298216	5 249	448	8935	4.5	402	1952 1953 1954 1955 1956 1957 1958 1959	1 21 74 90 95 75 50 37	12960 8729 8355 9456 8916 9211 9669 9328 7558	4.8 4.6 4.6 4.0 4.5 4.5	627 393 382 432 407 409 434 410 341	7 11 15 33 32 31 5	9370 9737 9502 9422 9284 9049 9317 9092	421 474 455 445 420 421 426 368	8 14 32 29 26 4	8515 9718 9230 9304 9711 9385	371 443 438 47 455
298570) 1	6	7635	5.2	398	1949 1950 1951 1952 1953 1954	1 1 1 1 1	8446 7800 7280 8460 6790 7040	5.1 5.0 5.2 5.3 5.6 5.0	431 373 381 448 379 355						
299169	5 3	5	7340	4.6	335	1955 1956 1957 1958 1960	1 1 1 1 1	6830 6420 5640 9670 7740	4.9 4.5 4.8 4.6 4.5	334 291 273 444 334	1 1 1	9650 8950 8740	344 476 406	1	10279	472
299471	+ 1	4	7585	5.0	376	1951 1952 1953 1954	1 1 1	6990 7900 7640 7810	5.0 4.8 5.0 5.0	352 381 383 387						
29982	7 1	1	5680	5.4	308	1951	1	5680	5.4	308						
300208	3 1	4	10403	4.3	446	1958 1959	2 2	11960 8845	4.4 4.2	523 369	1	9310 9330	473 440	1	10987 10431	
302629	5 84	198	8212	4.9	403	1952 1953 1954 1955 1956 1957 1958 1959	2 44 54 41 29 16 8	8275 8255 8377 8233 7917 8263 8956 9570	5.1 5.0 5.0 5.0 4.9 4.3 4.6 4.4	421 410 414 408 385 398 411 419	2 2 2 4 2 3	8035 8695 9365 7545 9045 8937 8368	393 434 442 361 407 425 389	2 3 2 2 3	824. 7390 8518 8480 8437	+0 + 3 ≠ 6
30352	2 1	1	8220	4.9	407	1953	1	8220	4.9	401						
308541	B 31	82	8 195	4.7	383	1950 1951 1952 1953 1954 1955 1956	3 13 22 15 15 8 4	8327 8252 8226 8167 8215 9264 10310 12155		398 386 389 372 372 429 469 601	1 1 1 1 1	9900 9360 8150 7890 8910 8810 8540		3 2 2	9428 9827 9461	455
30977	9 1	i	9590	4.2	402	1957	1	9596	4.2	402	1	8860	3'> ੫			
31157	4 2	2	11070	4.2	464	1954 1955	}	12950 9190	4.1 4.3	532 396						
31157	6 1	1	9590	4.3	409	1948	1	9590	4.3	409						
31177	5 1	2	7015	5.8	407	1953 1956	}	7626 7010	6.0 5.6	421 392						
31269	0 1	3	5940	5.0	298	1951 1952 1953	i 1 1	7360 5850 4610	5.1 5.0 4.9	375 292 226						
31482	4 1	2	8765	4.5	391	1950 1954		8600 8930	4.5 4.4	385 396						
31513	U 3	8	8779	5.0	441	1953 1954 1955	2 2 2	8535 9205 8685	5.1 5.1 5.2	434 464 440						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPCO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	12 Y8	RL		R	ECORD AVE	RAGL I	Y 51R	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YLAR	RECORDS NO.	MILK	TEST PC1.	FAT LB.	305-DAY (RECORDS NO.	MILK LB.	FAT	YLARLY HE RECORDS NO.	MILK	FAT LB.
						1956	GUERN 2	9005	4.9	440						
316538	3 4	7	9085	4.6	415	1948 1950 1952 1954 1955	1 2 2 1	10370 9405 9055 6220 6500	4.8	429 448 432 289 286						
316765	9	13	7554	5.3	399	1954 1955 1956 1957 1959 1960	1 2 6 2 1	6310 8715 7678 8835 6430 8160	5.2 5.4 5.4 5.1 5.1	329 456 410 474 331 414	1	8040 6710 6960	391 295 342	1	9036 8012 7957	54.5
3 1 7 3 1 8	1	1	9320	4.6	433	1949	1	9320	4.6	433						
3130∠6	1	1	7140	4.9	350	1959	1	7140	4.7	350	1	8440	386	1	10072	479
318274	14	76	8729	14 * A	428	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	9 6 10 11 11 3 4 7 5 3	8171 8968 9090 8447 8739 9488 8828 9669 8984 9287 6820	5.0 4.9 4.6 4.7 4.0 4.8	392 450 457 419 452 405 464 432 453 333						
318425	. 4	4	7318	5.0	366	1954 1956 1957 1959	1 1 1	7630 8780 5950 6910		430 445 284 306	1	9460 8670	417 412			
318429	2	3	5425	5.1	274	1955 1956	1 2	4970 5340	5.1	256 268						
3 196 39) 1	1	6620	5.3	351	1954	1	6620		351						
321300	23	52	6872	4.7	319	1951 1952 1953 1954 1955	4 11 16 13 6 2	7905 7122 6490 7040 7608 5835	4.6 4.7 4.6	326						
32 14 62	2 12	15	7917	5.2	406	1954 1955 1956 1957 1958 1959	3 5 2 2 2 1	6740 7546 7790 10910 9165 5700	5.6 5.2 5.2	325 416 405 563 462 274		12630 10735 7380	474 465 397	1 1	12579 11194 8938	
321668	3 1	2	7795	4.9	384	1956 1957	1	6510 9080		315 452				1	8415	402
322295	5 1	4	10065	4.5	454	1950 1951 1952 1953	1 1 1 1	9540 10040 10670 10010	4.4	411 459 471 475						
322600) 34	106	7693	5.0	384	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 9 12 17 20 17 12 8 5 4		4.9 5.2 5.1 4.9 5.1 5.1 4.8 4.7	438 364 373 401 408 402 437 450 350 407 457	1	10050 10320 11220 9490 10230 10470 10030	469 541 460 485	1 1	9963	448 472 382
322660	88	274	8287	5+1	425	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 15 33 41 44 42 38 25 18 8 5	7130 8730 8682 8180 8556 8230 8581 8027 9096 9084 8732 13733	5.2 5.3 5.2 5.1 5.0 5.2 5.1 5.2 5.1	454 431 441	2 2	9475 10070	446	2 1 1	8453 8927 10704	
32 3584	103	205	8233	4.7	382	1952 1953 1954 1955 1956 1957 1958	11 22 46 38 38 25	8190 7992 8452 8193 8378 8044 8865	4.5 4.6 4.8 4.8	364 358 389 391 396 374 413	1 3 4 5 8	8680 7553 8808 8816 8205 8626	457 390 430 435 395 410	4 5 8 10	8639 8577	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

197

DAUGHTER AVERAGE BY SIRE

				-			200110 1110				· ne silentino	Linit				
SIRL NU.	UAUGHTERS NU.	KECORDS NO.		TEST PCT.		FRESH	RECUROS NO.		TEST PCT.		305-DAY RECORDS NO.	CONTEMP MILK Lo.	FAT	YLARLY HI RECORDS NO.		
						1959 1960	GOERN 9 1		4.8 4.6	422 328	9	8457 8170	423 360	6	9250	437
323669	5 14	38	9272	5.0	455	1952 1953 1954 1955 1956 1957 1958 1959	1 5 4 8 6 5 5 2 2	11900 9508 9850 9496 8740 9096 9990 8475 9320	4.3 4.9 4.0 5.1 5.2 5.0 4.0 4.7 4.3	515 467 445 483 443 456 453 398 392	1	10020 9780	483 465	1 1 2	9897 9429 9396	455
326463	3 27	64	7228	4.9	354	1950 1951 1952 1953 1954 1955 1956	1 11 18 11 10 8 4	5660 7419 6911 7442 7809 7906 7423	5.0 5.3 4.9 4.6 5.1 4.5 4.5	284 389 340 343 401 376 334 490				1	9352 9963	448 472
327728	3 8	19	7653	4.6	349	1952 1953 1954 1955 1956 1957	5 6 4 2 1 1	7826 7402 7375 8440 8430 6860	4.4 4.7 4.7 5.0 4.9	348 345 331 396 418 335						
329249	9 I	3	10343	4.5	462	1955 1956 1957] 	9230 10060 11740	4.7 4.4 4.3	430 446 510						
33120	4 235	427	8209	4.7	384	1952 1953 1954 1955 1956 1957 1958 1959 1960	5 37 86 103 91 51 27 24 3	8830 7941 8145 8330 8095 6521 8998 8873	4.8 4.7 4.7 4.8 4.8 4.5 4.5	432 377 383 394 386 403 423 403 494	1 6 11 9 14 12 24 2	10080 9908 9611 9407 8853 8534 8897		10 5 11 9 8	9384 9380 9274 9042 9238	448 458 446 409 440
332084	4 15	32	6746	4.9	329	1949 1950 1951 1952 1953 1954 1955 1957 1958 1959	5 11 6 3 2 1 1 1	6966 6745 7475 7843 7585 7150 6500 6940 5880 5990	5.1 4.7 5.0 4.7 4.8 4.6 4.4 4.4 4.3 4.6	353 334 376 365 357 330 284 305 254 290	1	7950	3 1 2	ı	8666	410
332293	3 1	1	8740	4.9	424	1955	1	8740	4.9	424						
332819	9 I	2	7595	5.2	390	1954 1955	1	8660 6530	5.2 5.1	449 331						
333442	2 3	7	7734	5.0	384	1949 1950 1951 1952 1954 1957	1 1 1 1 1	7580 9150 5370 6770 7460 9740 7310	5.2 5.4 4.8 5.1 5.0 4.5 5.1	397 495 256 343 372 438 374	1	11080 10350				
335736	6 92	230	8194	4.7	382	1950 1951 1952 1953 1954 1955 1956 1957 1958	3 27 34 45 46 31 20 15 8	7423 8554 8196 8681 8191 8676 8867 8907 8726 10180		337 396 378 408 388 405 415 404 390 425	1 1 2 2 2 2 2	9470 10450 10260 9875 11750 8880 11430	49.3 527 521 508 483 420 429	2 2 1 1	10372 9810 9821 9287 12677	477 474 459 401 404
33605	3 1	ц	9133	4.4	400	1954 1955 1957 1958	1 1 1	8760 8550 9990 9230	4.3 4.8 4.2 4.2	379 414 422 384	1 1 1	10230 11690 10790 9110	489 552 534 431	1 1 1	8666 9363 9232	414 471 441
33639	5 1	1	7140	5.1	365	1955	1	7140	5.1	365						
33653		1	7110	5.7	402	1954	1	7110	5.7	40z						
33699		2	8560	4.8	411	1956	2	8560	4.8	411	1	8920	403	1	8055	393
33711	7 1	1	4930	4.4	215	1959	1	4930	4 - 4	215	1	6600	∠9h	1	8197	351

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OT YEAR	OF FRESH	TENTNO	KECU	KUS FR	OW THIS	STATE ON	LT								
	UAUGHTER	AVERAGE	8Y 51	RL		R	ECURD AV	ERAGE 8	BY SIR	Y8 3	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY (RECORDS NO.	ONTEMP MILK L8.	FAT	YEARLY HE RECORDS NO.	MILK	
							GUER	NSEY								
337294	1	1	8510	4.7	397	1957	1	8510	4.7	397						
3384 67	1	3	10393	4.5	472	1955 1956 1957	1	11330 9590 10260	4.5	525 431 461						
339378	5	9	7504	4.9	364	1954 1955 1956 1957	1 3 3 2	7730 7220 6673 7045		311 378 336 330						
340243	95 -	218	8978	4.5	399	1952 1953 1954 1955 1956 1957 1958 1959	19 39 52 48 28 21 9	8955 8984 8842 9443 9041 9804 11017	4.4 4.5 4.5 4.3	394 396 391 421 404 421 459 498	1 2 4 3 8 5 2	8380 8885 9113 9790 9424 9684 8725	414	6 4 8 4	8853 8933 9020 9704 9995	392 413 412
340985	213	447	8150	4.8	392	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	25 42 62 78 75 61 58 26 17	8519 8578 8559 8408 8277 8023 8009 8083 9381 9700	5.0 4.9 4.8 4.9 4.8 4.9	422 426 420 403 401 389 388 391 436 420	2	9127	518 433 436 396 400 400 406	6 6 23 13 13	8132 8064 8896 8799 9569	388 417 426
341048	1	1	9520	4.8	458	1951	1	9520	4.8	458						
34 14 37	62	188	8036	4.9	394	1948 1949 1950 1951 1952 1953 1954 1955 1956	9 21 34 35 28 23 19 13 5		4.9 5.0 5.1 4.9 5.1 4.9 5.1	420 402 385 403 403 430 398 413 461 416	1	8000 8350 7210	361 377 349			
342719	1	1	7160	4.9	353	1958	1	7160		353	1	5480	238			
343639	1	3	8663	4.6	395	1953 1954 1955	1 1 1	8330 8180 9480	4.6	379 376 430						
344841	179	390	8197	4.8	392	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 35 72 78 82 49 34 22	10325 8196 8260 8640 8414 8205 8415 8940 9034	4.9 4.8 4.9 4.8 4.7 4.8	477 398 395 418 403 389 400 413 416	1 3 4 7 5 9 15	8360 8457 8943 8440 7464 8797 8815	395 435 398 357 413 412	6 5 9 11 8	9258 9533 9449 8435 8933	45 l 444 404
345919	12	40	8127	4.6	375	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	6 8 9 6 2 2 1 1 2 2	8448	4.7 4.8 4.8 4.6 4.9 4.6 3.7 4.1							
346295	5	6	8916	5.1	454	1956 1958 1959	2 1 3	8255 8590 9307	5.5	428 470 464	1 3	9130 8697		1 3	9025 9334	437 454
340708	188	396	8203	5.1	415	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 15 18 27 19 30 66 91 03 36 17	7908 8216 7751 8258 9036 8424 8088 8479 818624 9021 8879 6560	5.3 5.2 5.3 5.1 5.0 5.1 5.0 5.1 5.0 4.8	408 434 407 436 459 426 408 429 411 438 452 417 314	1 3 10 8 11 10 7	8790 9287 9769 8825 9238 9165 8864 9960	428 431 463 427 446 434 407 318	7 7 10 11 5	9276 9376 9590 9595 9727 10290	447 463 449 449
346824	83	154	8065	5.0	403	1952 1953 1954	12 12 20	9226 8370 7659	5 · I	469 427 388						

NEW YURK

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

10103 5.2 518

4.3

4.0

5.2 94/0

TABLE 15.--DAUGHTEN-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

\$1 KE NO.	DAUGHTERS NO.	KELUKOS NO.		TEST PCT.		FKESH YEAR	RECURUS NO.		TEST PCT.		305-0AY RECORDS NO.			YEARLY HI RECORDS NO.		FAT
						1957 1959		10530 12270		540 625	1	11290 7950	454 401	1	11412 8393	4a3 420
36545	7 2	5	7389	5.1	373	1955 1957 1959 1960	1 2 1	5990 8860 9550 7880	5.2 5.2 4.9 4.3	313 462 469 339	1 1 3	9560 9250 10210	471 452 492	1	9178	453
365783	3 3	7	8489	4.8	435	1954 1955 1956 1957 1958 1959	1 1 1 1 2 1	8720 8450 9360 9900 7580 10280	4.7 4.4 4.4 4.6 5.3	409 374 412 439 348 548	1 1 1 1	9330 8340 9930 7680 9410	450 435 441 358 451	1 1 1	8317 7990 9897 8066 8578	3d9 365 464 3h3 399
366648	3 2	3	4555	4.8	222	1955 1956 1957	1 1	3070 3830 5660	4.4 4.3 5.2	136 163 294						
366730) 42	76	8362	4.7	396	1953 1954 1955 1956 1957 1958	1 15 22 20 12 5	9920 8688 8535 8451 8529 9058 8450	3.6 4.7 4.8 4.8 4.6 4.8 5.1	360 407 410 400 394 441 430	1 1 1 1 3	10020 10180 9000 9770 9080 8400	499 502 417 461 415 383	1 1 1 2 1	9320 8796 9429 9652 9167	443 421 458 463 435
36727	1 22	56	8320	4.7	389	1949 1950 1951 1952 1953 1954 1955 1956	1 4 12 6 12 9 7 3	8330 8148 7706 9292 9459 8286 9851 8900	4.8 4.6 4.6 4.6 4.6	508 391 365 440 428 381 455 411 465	1 1 1 2 2 1 2	8830 10390 11130 8655 10355 8670 10440	441 510 534 436 496 405 519	1 1	9418 10170 9320	428 471 426
37 188	3 1	1	8750	4.4	389	1957	1	8750	4.4	389				1	10399	403
37340.	3 236	541	8544	4.6	391	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 33 41 52 63 95 74 74 57 30 15	9833 8755 8771 8931 9029 8503 8714 8803 8770 8877 8739	4.7 4.6 4.6 4.5 4.7 4.6 4.5 4.5	472 409 416 412 414 384 407 400 395 398 381 457	1 3 6 8 5 16 22 13	9090 9540 8835 8656 9892 8975 8788 9134 8657	480 403 404 434 473 405 407 412 413	8 6 17 18 13 2	8689 8791 8902 8452 9108 9930	419 418 409 407 412 485
37 34 0:	5 16	54	8151	4.7	385	1954 1955 1956 1957 1958 1959	9 10 7 2 4 1	8219 7828 8506 8410 9365 10610	4.7 4.6 4.5 4.5	408 364 395 386 426 463 466	1 1 1	94 70 89 90 92 40 13 180	452 423 419 510	1 1 3	10606 8088 9636 9875	502 364 463 446
37438.	3 1	6	11265	4.4	500	1951 1952 1953 1954 1955 1957	1 1 1 1	12760 11210 11380 9750 11710 10780	4.4 4.1 4.5	588 508 497 403 508 497						
37511	1 18	43	7765	5•1	391	1952 1953 1954 1955 1956 1957 1958	14 6 8 6 2	8338 7639 7941 7798 8760 10330 10160	5.2 5.1 5.1 4.9 5.0	391 392 403 397 432 511 542	2 1 2 1	11280 12910 11200 9690 8840	451 420 442 465 464	1 2 1	6780 9200 6813 8611	341 396 352 436
37522	5 29	55	7929	5.0	391	1954 1955 1956 1957 1958 1959	6 23 10 6 7 3	7378 8270 7846 8453 6760 8053	5.0 4.8 5.0 5.0	382 409 375 424 336 390	1 1 1 2 3	9370 8050 8100 8400 9733	455 439 424 369 403	1 1 2 2	8971 8469 8033 9560	450 437 373 378
37547	6 2	6	6475	4.8	306	1955 1956 1957	2 2 2	6630 6320 6475	4.8	319 299 301						
ó 7₀ 01	9 1	1	8490	4 • 6	381	1957	1	8490	4.6	387						
37790	6 35	49	8456	4.5	383	1955 1956 1957 1958 1959 1960	6 19 13 8 2	8508 8775 7524 7960 9620 11070	4.7 4.6 4.4	397 392 353 370 419 532	1 2 5 2 1	8310 8965 9942 8800 10480	412 392 410 405 508	1 2 5 1	9036 8513 10218 9385	416 374 425 448

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL CRECUING CROWNLATIONS--GROUPED BY BREED,
BY YEAR OF FRESHMIG--ROOMS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

RELORD AVERAGE BY SIRE BY ELSHERING YEAR

	DAUGHTER	AVLRAGE	12 YS	RE		R	EC040 7A	cRAGE :	SY SIR	Y6 3	E /ESHEWING	YL Va				
SIRE NO.	DAUGHTERS NU.	KECURDS		TEST PCT.	FAT LB.	FRESH YLAR	KLCORDS NO.		TEST PCT.	FAT				HEFORDS AFIREA H		FCI
							SUER	NSLY								
37920	1 2	4	9427	4.8	453	1955 1956 1957 1958	1 1 1	9820 8730 12126 8630	4.9	453 430 360 424	1	11040	431			
37945	7 1	1	9860	4.8	473	1954	1	7 860	4.6	4/8						
380662	2 1	3	12013	4.2	503	1954 1955 1956	 	11920 11670 12450	4.4	500 513 510	1	70570 7510 9040	516 496 500	1	9363 9 1 36	
380716	5 27	61	7131	4.7	333	1952 1953 1954 1955 1956 1957 1958 1959	3 15 17 14 7 3 1	8770 7488 7086 7648 7297 6980 8640 6820	4.7	445 348 325 307 337 337 290	1 2 2 4 1	8550 8625 8640 9085 7995 9070 8700	442 482 457 454 385 436 370	2 2 2 1 1	6982 6569 0007 7957 8982	40) 416 404 377 442
58123	1 6	12	7667	5.0	385	1954 1955 1956 1957 1958	3 3 2 1 3	7487 7937 7966 7500 9233	5.0 4.8 4.0	337 372 365 360 477	i	10310	516	2	1675 ?	5.4
382 1 48	3 8	18	7344	4.9	35 d	1951 1952 1953 1954 1955 1956 1957	2 2 1 1 1 2	8032 7263 8635 9640 8000 6490 9630 8615	5.1 4.9 4.9 5.0	393 354 430 473 394 327 457 391	1 1	9080 6490 10070	456 327 536	1	785 [3. 0
3 837 18	3 45	140	9د58	4.9	406	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	13 23 26 20 21 13 9 3	8310 7963 8416 8026 8506 9100 9276 9096 10233 10915 5660	4.7 4.7 4.7 4.7	420 330 409 394 409 437 431 433 468 550 250	1 1 1 1 2	9570 13350 9960 10510 8070 12470 10585	541 431 442 337 434 321	1 1 1 2	7990 7030 11756 10431 0323	39d 34 405 562 377
384111	2	2	10950	4.6	493	1959 1960	1	12860 9040	4.2 4.9	546 440	1	9530 11600	424 412	1	9614 12827	453
386975) 1	1	6800	5.0	337	1958	1	6800	5.0	337	1	1720	37 I	:	9211	455
386781	, 16	37	7280	4.1	342	1950 1951 1952 1953 1954 1955 1956 1957	3 3 7 5 5	6057 6117 7128 8267 7864 7438 7930 9412	5.2 5.0 4.8 4.7	268 295 369 419 331 349 391 423 400	2 1	8405 6470	367 310	2 1	8062 94 7 2	3 ° 0 527
391990	ذ (b	8443	4.5	380	1954 1955 1956 1957	3 2 2 1	8160 6205 8135 9620		362 365 361 491	1 1 1	4140 640 8340 8350	38n 349 337 416	1	723a 7352 8305	353 356 559
394072	2 2	2	გ ა05	5.4	460	1957 1959	1	9090 79 20	5.4	489 430	1	9630		1	9657	
395160) i	2	7485	4.6	348	1953 1954	1	8030 6940		367 306						
395528	3 1	3	9687	4.8	460	1953 1954 1956		9660 8890 10510	4.7	400 435 488						
39839	1 82	115	7593	5.1	381	1955 1956 1957 1958 1959 1960	22 20 15 29 28 1	7867 6568 7923 7959 7856 7850	5.1 5.1 5.1	412 336 402 595 405 391	2 6 24 27 1	5135 8702 9343 9130 7770	391 399 414 413 386	2 7 20 24 1	6343 6703 9044 9580 8743	419 400
399671	4 13	21	9528	4.8	454	1954 1955 1957 1958 1959 1960	4 3 2 7 4 1	6825 7430 11100 10117 11325 11620	4.8 5.2 4.8 4.0	325 357 376 487 537 355	 5 4 1	11160 16476 3995 10120	4837	1 2 4 1	6533 9985 9521 16566	417

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY GREEL, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIR: NO.	DAUGHTERS NO.	KECURDS		TEST PCT.	FAI LB.	FRESH YEAR	RECURUS NU.	LB.		FAT LB.			FAI	AFCORD?		FAT
							GULRA	12EA								
400062	2 2	14	7649	4.2	314	1955 195ø 1957 1958	 	6300 7230 8090 8090		292 334 303 373						
40152 ¹	. 29	79	8148	4.7	378	1950 1951 1952 1953 1954 1955 1956 1957	4 11 13 11 13 9 6	9845 7576 8550 8975 8436 8602 8507 8098 5016	4.0 4.0 4.7 4.6 4.7 4.0 5.1	474 364 367 432 397 396 397 372 258	1 1 2 2 2 2 2 2 1	11970 12000 4755 10005 9700 8740 10065 7760	579 560 473 495 475 445 484 365	3 2 2 1	9487 10617 10475 7979	
402236	5 2	2	6995	4.8	333	1954 1959	1	7380 6616	4.9	365 301	1	100 80	478			
40400	3 1	1	5140	4.9	250	1955	1	5140	4.9	250						
404451	4 2	2	9725	5.1	49∠	1954 1955	1	9890 9560	4.6 5.6	450 534						
409632	2 5	7	8595	4.8	411	1955 1956 1957 1958	2 1 3 i	8230 5820 3040 7560	4.5 5.1 5.0 5.2	310 349 395 407	<u></u>	8950 10500	0د 416	1	8546 8055	414
409262	2 ∠1	∠3	7957	4.9	396	1957 1958 1959 1960	1 0 11 5	8330 7112 8218 7966	5.0 5.2 4.8 5.0	417 375 398 398	1 4 11 4	8080 7890 8948 10283	382 374 406 380	1 4 7 5	7804 7826 9804 11129	357 579 450 454
410590	2	2	9940	4.5	440	1957 1959	1	10240 9640	4.J 4.4	465 426	1	9020	429			
41196	7 1	1	6/00	4.6	305	1955	1	6700	4.0	305						
412090) 2	2	7605	4.6	345	1956	2	7005	4.0	345						
41414:	5 1	žą.	8358	4.7	390	1952 1954 1955 1956	1 1 1 1	8370 7730 8856 8480	4.6 4.6 4.6 4.6	388 355 418 400						
41518	5 3	6	9105	4.6	417	1955 1956 1957	3 1 2	9503 8600 8 94 0	4.0 5.0 4.2	437 429 579						
41535.	ś 1	1	7350	4.8	352	1959	1	7330	4.8	352	1	o l 50	392	1	8328	401
420221	4 1	1	8130	5 · l	414	1955	1	8130	5.1	414						
42001	9 19	43	7960	4.8	385	1952 1953 1954 1955 1956 1957	2 12 11 7 6 2	8875 7821 8125 9054 8490 9636 7240	5.3 4.9 4.0 4.9 4.9	482 383 389 444 416 440 358	1	11410 8090	52z 372	;	11336 9036	
420dz(O 3	9	6835	4.9	347	1953 1954 1955 1956 1957	3 2 1 2 1	6440 2336 8330 8530 8530	4.9 5.4 5.2 5.3	327 446 434 452 365	1	11720 10160 11720	510 490 537	1	9091 881# 6971	469 450 457
42153	9 1	1	5050	4.2	212	1960	1	503 u	4.2	212				1	8393	4/0
4231v	2 31	80	7792	4.8	375	1952 1953 1954 1955 1956 1957 1958 1959	9 13 14 15 6 12 8 2	7466 9322 7589 8007 8073 8372 8030 8360 6560	5.0 4.2 4.9 4.0 4.6 4.7 4.0 4.8	3/1 390 372 384 3/3 373 384 388 317	1 2 1 3 5 2	13690 11535 11390 11200 9040 10575 3580	510 449 404 457 414 475	1 1 3 5 2 1	12252 12273 10944 9935 9636 5164	403 442 444
42438	7 5	11	8803	4.9	420	1953 1955 1956 1957 1958 1959	2 2 2 3 1 1	8850 9765 11530 9610 5520 3600	4.8 4.8 5.1 5.0 5.3	413 464 525 473 278 460	1	8500 8530	445 413	1	υ46₹ 9527	45 7 433
42554	5 73	100	85.28	4.9	421	1955 1956 1957 1958 1959 1960	12 14 21 23 24 6	8752 8154 8188 8790 8869 7742	5.2 5.0 4.9 5.0 5.0	449 406 395 440 440 343	1 12 19 24	8035 9522 8016 6442	448 40) 43 I 39 3 38 I	12 17 23 5	8914 9683 9490 9164	4×3 4>>
42557	0 29	45	1405	5.2	381	1955 1956	14 12	7392	5.3	391 263	1 4	7330 0/10	491 388	1 2	820° 7608	586

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--KECORDS FROM THIS STATE ONLY

203

DAUGHTER AVERAGE BY SIR.

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAK	KLCORUS NO.		TLST PCT.	FAT L8.	305-DAY RECORDS			YLARLY H RLCOROS NO.		
						1957 1958 1959 1960	GUERN 13 3 2 1	7905 9020 8005 6920	5.1 5.2 4.8 5.1	403 465 389 352	4 3 2 1	9675 8347 8145 7110	448 378 333 245	3 3 2 1	10355 8731 8432 7119	453 409 360 267
426820	7	10	7397	4.5	332	1955 1956 1957 1958 1959	2 1 1 3 3	6815 5760 8400 8897 6363	4.3 3.8 3.9 4.6 4.6	289 218 324 408 289	3 2	9180 5800	428 264	2 3	9107 9454	370 405
4281 5 8	3 2	2	8465	5.1	429	1956 1957	1	9070 7860	4.9	446 411						
43132	3 1	خ	68 I 0	5.7	390	1953 1954	1 2	7220 6605	5.7 5.8	411 360						
431713	3 1	1	8620	5.5	473	1955	1	8620	5.5	473						
433381	2	2	7720	4.5	346	1955	2	7720	4.5	340						
436380	3	Ц	8580	4.9	410	1958 1959 1960	1 2 1	9390 8245 9600	4.9 4.9 4.5	459 399 436	1 2 1	9110 8790 9150	441 433 435	1 2 1	9025 9178 9723	437 448 475
4372n3	3 1	1	7230	4.4	319	1957	1	7230	4	319						
44 185	1	3	1957	4.6	365	1956 1957 1958	1 1 1	9150 9220 5500	4.5 4.7 4.5	410 435 249	1 1 1	10990 10750 12450	497 471 616			
443141	, 5	6	6879	5.3	365	1958 1959	1 5	7380 6772	5.7	42 I 355	1 4	7980 8660	376 401	1 5	9211 8880	
444418	3 1	2	6380	4.6	296	1954 1955	1	6790 5970	4.7 4.5	322 269						
445009	21	39	7482	4.7	352	1953 1954 1955 1956 1959	13 15 7 3	7632 7733 8467 7960 8440	4.7 4.7 5.1 4.7 4.8	353 368 428 380 406	1	8120	436	1	8764	458
445804	2	2	10270	4.3	442	1958	2	10270	4.5	442	2	9930	459			
45422	3 1	2	7015	4.8	33 8	1956 1957	1	7250 6780	4.8 4.8	349 326						
454224	1	3	8163	4.8	397	1956 1957 1958	1 1 1	7140 8010 9340	4.9 4.5 5.1	348 363 480	;	8740 8770	397 423	1 1 1	7358 8306 8197	350 369 377
454483	3 1	1	6120	4.6	278	1958	1	6120	4.6	278	1	11020	426	1	80 5 5	389
457382	2 21	34	8074	4.6	371	1954 1955 1956 1957 1959	8 13 7 4 2	7720 7944 7829 8825 9230	4.6 4.6 4.4	364 362 365 407 410	1	9860 10500 9960 9720	443 463 440 509	1 1 1	9533 10638 11445	440 474 560
45/38	. 1	1	11830	3.9	464	1957	1	11830	3.9	404						
457531	1	1	7870	5.6	440	1955	1	7870	5.6	440						
45/544	1	1	7450	4.9	365	1960	1	7450	4.9	365	1	1640	36 8	1	11763	50 I
459489) 4	6	8678	4.7	405	1955 1956 1957 1958 1960	1 2 1 1		4.7 4.8 5.0 4.8 4.3		}	7910 9460		;	8349 102 7 9	
46173	5 31	41	7178	4.6	326	1956 1957 1958 1959 1960	4 15 6 14 2	6930 6823 9427 8497 5405	4.6	315 306 431 385 260	1 6 6 14	3220 7708 8740 8503 7800	429 366 413 396 385	1 6 6 14 2	8491 8259 9011 9055 9690	
465262	2 4	4	9090	4.7	425	1959	4	9090	4.7	425	4	7940	409	4	8573	427
46597	7 33	50	B280	4.7	392	1954 1955 1956 1957 1959	4 17 14 11 4	7166 8226 8526 7968 10035	4.8 4.7 4.7	339 392 405 374 496	3 3	7807 8850	365 4 1 4	3 3	5302 9628	35.7 468
46844	1 1	1	9530	4.0	382	1958	1	9530	4.0	382	1	12090	304			
47094	7 2	4	8130	4.7	376	1955 1956		10380 10230		482 461	1	10710	50v			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY CREED, BY YEAR OF TRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKÉ NU.	DAUGHTEKS	KELORDS NO.		lest PCT.	TAT LS.	FRESH YEAR	KLCUKUS NU.	MILK LB.	TEST PCT.	FAT Lb.	305-DAY RECORDS 340.			YLARLY H RECORDS NO.	MILK	
							JUER	NSEY								
						1957	ì	9510		444				1	10399	500
						1958	ì	6200	4.7	290	1	11020	425	1	8055	389
47245	0 1	1	7610	5.5	419	1958	1	7610	5.5	419	1	10900	415	1	8055	389
41395	4 1	3	8237	4.1	330	1957	1	8280		332	1	8200	378	1	832K	311
						1958 1960	1 1	7860 8570		331 546	1	8250 808 0	395 370	1	7118 8673	320
						1700	'	0310	4.0	340	•	0000	310	•	0013	412
47814	2 1	2	7210	5.3	384	1957	2	7210	5.3	384	1	13140	427	2	12230	434
48507	9 11	14	6800	5.1	340	1956	16	6926		349						
						1957	4	6395	5.2	323	1	9290	367			
48885	6 4	6	8838	4.6	40성	1955	3	8797	4.8	426						
						1956	3	8480	4.4	369						
49729	4 22	24	8210	4.7	385	1956	ز.	8287	4.0	398						
						1957	b	8286	4.9	404	3	8637	406	3	9821	469
						1958	4	8306		363	14	8220	372	4	9366	431
						1959 1960	6	9050 7377		468 345	3	9057 8413	405 385	5 3	9359 9545	430 455
49/55	3 13	13	8 185	4.6	374	1957	8	8178		367	5	9244	415	5	9014	376
						1958 1959	4	8490 7000		400 524	4	8015 8500	401 356	3	8349	396
50350	6 11	15	8480	4.7	396	1957	3	9320		418	2	8500	393	3	9823	471
						1958 1959	7	7831 9160		372 435	6	8328 9163	400	6	8275 9372	394 437
						1960	1	6930		304	i	8260	416	i	8938	457
. 0 2 1	2 14	17	9215	4.9	453	1957	1	L 2211	l. 7	0.711						
503» I.	2 14	17	9215	4.9	455	1928	,	5820 8 73 9		272 435	7	8571	417	7	8617	414
						1959	8	980 7		485	5	9088	428	8	9532	450
						1960	1	11370	5.0	565	1	1240	351	1	9548	471
50944	6 5	8	8959	4.7	418	1957	i	8090	4.0	574	1	9040	400	1	10224	423
						1958	4	8045	4.7	403	14	8660	40 o	14	8652	400
						1959	∠ 1	10770		470	2	9365	441	2	9892	443 303
						1960	'	9220	4.7	436		6910	322	'	8491	363
51230	2 14	15	9055	4.9	416	1958	6	10272		429	5	9110	421	6	9659	455
						1959	9	8150	5.1	406	4	8506	404	В	9493	111.3
516.10	4 7	8	8257	4.7	395	1958	1	9550	5.3	502	1	8870	476	1	9745	448
						1959	6	8495		412	6	8107	407	6	9035	429
						1960	1	7010	4.4	306	1	9920	446	1	9963	44 1
51677	9 1	1	6640	4.1	271	1959	1	6640	4.1	271				1	9156	446
52114	7 1	1	8840	4.4	390	1959	1	8840	4.4	390	i i	8560	38∠			
52115	0 5	5	8124	4.5	399	195⊋	4	8358	4.5	386	3	10640	456	4	10042	437
						1960	1	10190	4.5	455	1	9440	417	1	16671	477
52 37 1	7 8	8	6316	4.8	304	1959	4	6033	5.1	311	3	8667	423	3	9094	434
						1460	4	6603		297	4	5545	230	2	9576	452
52655	1 5	5	7000	4.9	351	1959	,	8117	h O	398	غ خ	aga n	433	1	9200	413
32033	. ,	3	7200	4.9	354	1960	3 /	5825		283	3	8940 9180	437	2	9395	413
52659	14 14	5	7670	4.5	345	1959 1960	3	7090 8200		335 543	2	1900	315 74	3 2	7318 11756	350 424
						1700	2	0200	4.2	343	•	1 700	1.4	2	11130	464

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SURVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRL NU.	DAUGHTERS NO.	RECOROS NU.	MILK L8.	TEST PCT.	FAT LB.	FRESH YEAR	RLCORUS		TEST PCT.		305-DAY (RECORUS NO.	CONFLMP MILK LB.	FAT	YLARLY HARLORDS	RD AVE MILK LB.	FAT
							HOLS	TEIN								
63376	1 3	9	8589	3.4	294	1947 1948 1950 1952 1953	5 1 1 1	7968 6540 10680 9640 11170	3.8 3.4 3.2	278 247 360 307 366						
63968	1 12	36	9701	3.5	348	1947 1948 1949 1950 1951	22 4 4 4 2	10338 13468 12688 13035 12830	3.4	375 467 431 437 472						
64225	1 17	50	11659	3.5	403	1947 1948 1949 1952 1954 1955	43 2 1 2 1 1	11712 14410 10540 14615 10030 11100		406 509 364 530 321 354						
64346	0 20	49	108∠8	3.7	400	1947 1948 1949 1950 1951	36 5 3 2 3	10628 11626 12306 12960 12187	3.9 3.6 3.8	394 447 447 498 458						
64 35 7	9 22	64	11938	3.6	428	1947 1948 1949 1950 1951 1952 1953 1954	30 10 5 4 3 2 2 1	11836 12433 11772 13813 13763 15245 11505 11310 13390	3.6 3.6 3.0	422 449 415 493 479 505 369 458 523						
64 39 3.	3 7	∠8	10441	3.8	394	1947 1948 1949 1950 1951 1952 1953	12 3 4 3 2 2 1	10481 11110 10860 9853 10365 11440 12710 8760	3.0 3.9 3.5 3.8	393 435 424 352 402 395 489 337						
64488	3 41	112	10791	3.8	405	1947 1948 1949 1950 1951 1952	76 7 3 2 1	11021 11109 13000 12230 10380 12060	3.8	414 597 489 441 357 438						
65836	1 67	172	11362	3.4	387	1947 1948 1949 1950 1951 1952 1953 1954 1955 1959	13 9	11388 11945 12132 12597 13459 12993 13600 12177 8460 12710 11950	3.4 3.5 3.5 3.5 3.8 3.5 3.5 3.5	389 409 423 435 452 451 522 432 285 451 424	1	11120 10660			12034 12546	
o5755	5 86	290	11059	3.6	395	1947 1948 1949 1950 1951 1952 1953 1954 1955	25 23 16 10	10733 11699 13036 13434 12647 13452 12777 12970 12730	3.5 3.6 3.5 3.5 3.5 3.5	385 415 473 476 456 474 441 454 476 511						
66696			132∠5			1947 1949	1	13200 13250	3.6	48 1 504						
66946		14	11279		444	1947 1948	13	11414 14250	3.7	446 526						
67262		1	16780		596	1948	1	16780		596						
67309	5 ชโ	270	12536	3.5	438	1947 1948 1949 1950 1951 1952 1953 1954 1955	54 35 33 38 36 30 15 13	11668 13846 13852 13133 12790 14734 14112 13440 13246 12530	3.5 3.5 3.6 3.5 3.7 3.5 3.7	402 476 480 462 456 524 516 471 492 400	1	13990 12940	518 461		,	

TABLE 15.---OAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

51kē NO.	DAUGHTERS NO.	RECURUS NO.		TEST PCT.	FAT LB.	FRESH YEAK	RECORDS NO.		1621 PC1.	FAT L8.	HECOKDS 105-DAY			YEARLY H		
						1957 1958	HULS 5 2	13680 17630	3.6 3.6	495 644	2	144o5 15950	531 571	1	10867	ว์กิว
673525	1	1	6740	4.0	268	1947	1	6740	4.0	268						
675043	3 250	813	12925	3.4	439	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	250 112 113 99 76 57 40 25 20 12 3	12888 13067 13987 13325 13909 13523 15026 14897 14485 13247 14313 11470	3.4 3.4 3.5 3.4 3.5 3.4 3.5 3.1	434 441 477 458 480 459 513 508 495 460 441 403	1 1 1 1 1	15200 12430 11210 13460 14120	577 460 418 540 595	1	11805	4 .05
675045	34	110	12053	3.5	416	1947 1948 1949 1950 1951 1952 1953	82 10 7 5 4 1	12079 13074 13664 12842 12345 8130 9400	3.4 3.5 3.5 3.3 3.4 3.7 3.9	412 456 475 428 420 298 364						
675347	14	31	11466	3.7	417	1947 1948 1949 1950	26 1 2 2	12080 12620 14420 13780	3.6 3.5 3.5 3.6	432 443 506 499						
675837	7 - 1	1	7610	3.2	243	1947	1	7610	3.2	243						
676723	3 1	1	12830	3.3	424	1949	1	12830	3.3	424						
679651	150	5òa	11621	3.6	418	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	168 82 71 59 50 37 36 28 14	11458 12044 12858 12189 12241 13513 13360 13220 13770 14810 12185	3.6 3.6 3.6 3.5 3.5 3.5 3.5 3.5	419 433 464 446 440 480 475 472 489 509 426						
6800 (1	263	862	114/8	3.7	418	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	319 134 120 94 63 41 34 23 16 8 6	11346 12071 12495 12739 12929 13351 12984 13571 12995 13475 13815 10190	3.7 3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	416 441 456 462 470 487 469 463 497 495 368 537	1 3 2 1	15960 11960 11750 10505 16780 6200	540 581 399 399 617 222	3 2 1 1	11067 9745 12055 7521	419 388 496 290
68∠048	3 1	7	14996	3.8	565	1952 1953 1954 1955 1956 1957 1958) 1 1 1 1	11660 9000 16760 14860 17890 16960 17640	3.0 3.9 3.2 3.8 3.7 4.0 4.2	423 350 537 558 669 676 742				1	13821	525
682072	2 152	502	11226	3.7	417	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	19 35 51 70 76 71 67 44 34 18	10252 10103 11548 11667 11667 11771 11646 11380 12463 11419 12570 12090		384 382 425 434 432 437 427 419 463 419 458	1 2 4 1 4 2 3 2	15970 14900 14538 13270 15590 14490 14027 11575	508 532 525 583 540 515			461 470
68499	1 32	112	12756	3.6	453	1947 1948 1949 1950 1951 1952 1953 1954 1955	13 12 17 15 10 15 9	11150 12240 14111 13714 13381 12672 12485 14288 12543	3.5 3.6 3.5 3.5 3.5 3.5	410 428 489 487 467 446 430 524 453						

* YURK

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHLNING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-DAY CO RECURDS NO.		FAT			FAT
						1956 1957 1958		TEIN 12542 15820 13865	3.0	452 562 487						
690/8	1 10	36	12368	3.5	433	1947 1948 1949 1950 1951		12326 12772 14796 14530 9010 20060	3.3 3.4 3.4 3.7	428 426 500 500 330 686						
69249	8 61	163	11240	3.5	390	1947 1948 1949 1950 1951 1952 1953	29	10787 10821 12247 11543 12422 12798 13520 12180	3.5 3.5 3.5 3.4 3.5	577 581 426 402 418 451 474 413						
695641	4 80	200	11040	3.6	394	1947 1948 1949 1950 1951 1952 1953 1954 1955	73 36 29 21 14 12 9 4	10636 11050 11780 11831 13074 12518 11899 12283 13770 10120	3.6 3.6 3.8 3.8 3.7 3.8 3.7	422 421 494						
69843	3 63	179	11856	3.4	406	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	18 28 20 23 27 20 13 7 4	10983 11596 12765 13230 12437 13007 13755 14124 14105 12300 6850 13680 14540	3.4 3.5 3.4 3.5 3.4 3.5 3.5 3.4 3.3	375 395 445 445 414 439 481 483 471 425 220 454 542	ı	12550	402			
698491	5	11	8602	3.5	297	1947 1948	8 3	8859 8980	3.5	303 321						
69850	5 1	1	13580	3.6	488	1952	1	13580	3.6	488						
69945	2 7	13	11821	3.5	413	1948 1949 1950	5 5 3	11436 11886 12680		402 412 456						
70196	2 16	47	9862	3.7	362	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 3 5 4 6 3 7 7 6	13090 14403 11476 11488 9622 9950 7536 9899 8884 10035	3.0 3.6 3.6 3.5 3.7 3.8	401 547 423 410 533 543 282 370 529 356						
70222	4 08	221	12261	3.6	430	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	15 39 41 35 32 23 15 9 8 2	12333 11374 13296 12499 123568 13568 12293 12703 12288 13805 14490 13190	3.0 3.5 3.6 3.6 3.6 3.6 3.6 3.7	488 440		12200 11770		1	12688 11587	45 <u>2</u> 426
70476	6 11	35	11586	3.6	410	1947 1948 1949 1950	24 5 3 2	11729 12970 13277 12735 9600	3.7							
70510	1 42	115	11170	3.6	400	1947 1948 1949 1950 1951 1952 1953	14 20 20 15	13170 11093 11389 11611 11499 11886 11422	3.0 3.1 3.1 3.7 3.6	418 425 427 427						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

208

OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

OAUGHIER AVERAGE E	DT SIKL	KECOKO AVER	TAGE BY SIKE BY	FRESHENING YEAR	
SIRE DAUGHTERS RECORDS NO. NO. NO.	MILK TEST FAT LB. PCT. LB.	FRESH RECORUS YEAR NO.	MILK TEST FAT LB. PCT. LB.	305-DAY CONTEMP. AV. RECORDS MILK FAT NO. LB. LB.	
		1955 1	EIN 10718 3.6 389 6320 3.3 207 10290 3.4 351		
705343 1 1	10010 4.8 476	1948 1 1	10010 4.8 476		
70 ⁴⁹ 44 116 341 1	11303 3.5 387	1948 52 1 1949 45 1 1950 32 1 1951 26 1 1952 24 1 1953 16 1 1954 10 1 1955 7 1 1956 4 1	0669 3.5 360 12225 3.5 423 12749 3.5 440 12751 3.5 446 12638 3.5 436 12967 3.4 442 12528 3.4 422 13394 3.4 458 13041 3.3 433 13915 3.2 447 11377 3.2 363	1 8740 310 1 8710 279 1 8270 279 2 12965 502 1 10410 572 2 11540 409	2 11745 416 1 9984 346 2 11783 418
710681 1 1	15290 3.4 526	1950 1 1	15290 3.4 526		
7134∠9 86 235 I	11185 3.6 401	1948 45 1 1949 45 1 1950 36 1 1951 25 1 1952 17 1 1953 14 1 1954 9 1 1955 4 1	10444 3.7 382 11381 3.0 407 11395 3.0 428 11619 3.0 415 12167 3.5 425 11635 3.5 425 11635 3.5 401 12284 3.6 436 12284 3.5 447 12723 3.4 433 13480 3.7 499 14930 3.4 505		
715512 1 3	16733 3.3 561		16700 3.4 560 16800 3.3 562		
715532 10 28	9279 3.7 336	1948 8 1949 4 1	8495 3.5 294 9073 3.6 325 11050 3.6 395 11000 3.5 384		
715812 119 290	11943 3.5 410	1948 51 1 1949 61 1 1950 59 1 1951 44 1 1952 29 1 1953 16 1 1954 12 1 1955 9 1 1956 2 1 1957 3 1	10943 3.4 367 11331 3.4 386 12039 3.5 419 12544 3.5 437 11973 3.5 419 12419 3.4 428 12303 3.4 428 12408 3.5 443 13429 3.4 458 15955 3.5 549 13573 3.3 442	3 10817 400 1 12500 432	3 10736 399 1 13396 471
718393 74 176	10322 3.4 353	1948 18 1 1949 11 1 1950 6 1 1951 / 1 1952 9 1 1953 7 1 1954 8 1	10332 3.4 350 10752 3.4 367 12544 3.5 429 11560 3.5 410 11543 3.5 398 11580 3.4 389 12630 3.4 429 12775 3.3 426 14070 3.0 421		
718551 8 36	12057 3.7 440	1950 10 1 1951 7 1 1952 4 1 1953 5 1 1954 4 1 1955 1 1	12600 3.0 457 11786 3.7 433 11529 3.7 431 12525 3.6 452 11618 3.7 424 12998 3.6 469 13960 3.6 508 14950 3.7 553 13320 3.4 450		
718649 1 1	4250 3.6 152	1947	4250 3.6 152		
716073 37 114	11629 3.5 404	1948 25 1 1949 10 15 1 1950 15 1 1951 10 1 1952 11 1 1953 8 1 1954 4 1 1955 2 1 1950 2 1 1957 1	1118d 3.4 579 11946 3.5 417 13103 3.6 404 11310 3.5 394 13276 3.0 475 11721 3.3 387 1282C 3.5 457 13023 3.6 484 12910 3.4 438 14055 3.5 490 7790 3.5 442	1 13660 544 1 9140 352	1 13494 474
719452 6 17	11366 3.7 415	1948 6 1 1949 6 1	10858 3.6 394 11045 3.7 409 11882 3.6 425 12040 3.8 453		
719538 2 3	10880 3.5 384	1948 1 1	9920 3.8 378 11880 3.6 429 10860 3.3 364		
719598 85 301	12220 3.6 437		12035 3.6 433 12484 3.6 452		

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

RECORD AVERAGE BY THE BY THESHENING YEAR

SIKE NO.	OAUGHTEĶS	RECOROS NO.		TEST PCT.		FRESH YEAR	RLLORUS NU.		TLS1 PCT.		SUS-BAY RECORDS NO.		FA1	YLARLY HI RECORDS NO.	MILK	
						1949 1950 1951 1952 1953 1954 1955 1956	H0ES 35 24 21 18 12 10 6 4	TEIN 13468 13625 14381 14328 14948 15470 15295 14658 17180	3.7 3.0 3.1 3.0 3.0 3.0 3.6 3.6 3.6	495 491 536 531 539 562 553 532 645						
72234	2 3	11	12612	3.7	467	1948 1949 1950 1951 1952 1953 1954	1 2 1 2 2 1 1	16310 11260 16360 14440 14135 13350 10680 11200	3.6 3.6 3.7 3.4 3.7 3.6 4.1 3.7	582 428 609 483 528 482 433 415						
72390	3 15	26	12470	3.5	442	1947 1948 1949 1950 1951 1952	1 6 6 3 2 2	7020 12762 11605 12013 11827 14960 14210	3.6 3.6 3.0 3.7 3.3 3.3	255 462 417 443 394 493 472						
12421	υ 1	1	12990	3.6	465	1947	1	12990	5.6	465						
72550	2 56	208	1207∠	5.4	408	1947 1948 1949 1950 1951 1952 1953 1954 1955	78 27 27 19 17 10 7 5	11400 12149 12915 12957 13219 13859 14004 14654 16126 12530	3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4	587 416 439 443 445 464 464 477 537 422						
72160	9 565	1959	11757	3.6	426	1947 1948 1949 1950 1951 1952	306 310 294 253 216 182	11509 11914 12429 12064 12314 12569	3.0 3.0 3.6 3.6 3.6	415 429 450 437 445 448	i ! !	11870 13550 13950	465 479			
						1953 1954 1955 1956 1957 1958 1959 1960	137 103 68 46 26 8	12459 12559 12820 12909 12489 14563 14693 13950	3.5 3.5 3.6 3.5 3.5 3.5 3.3	439 445 450 460 428 497 468 447	3 2 4 5 4 3	12370 13067 12990 11940 12394 11123 14180	466 467 471 433 439 405	3 2 4 3 3	11038 12165 12181 11467 14334 14606	40 1 4.35 442 413 527 513
12891	0 1	1	10950	١.٤	340	1947	1	10950	3.1	340						
73051	6 4	7	9986	3.6	354	1953 1954	4 3	9640 9730	3.6 3.7	343 358						
73386	2 I	1	15970	3.1	500	1950	1	15970	3.1	500						
73535	9	24	11/38	3.6	418	1949 1950 1951 1952 1953 1954 1955 1956		5630 9305 13385 14020 13720 12378 12738 11457 14220	3.0 3.5 3.7 4.0 5.5 3.4 3.8							
737+1	5 479	1.568	10409	3.8	391	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	70 110 190 247 208 153 153 153 153 99 60 44 23 14 7	10896 10429 10608 11039 10905 10698 11486 11020	3.6 3.8 3.8 3.8 3.7 3.7 3.7 3.7 3.6 3.7	399 414 405 396 420 403 424	4 5 0 0 5	12200 12850 13336 12353 12745 13028 13549 12789 11710	454 478 460 447 463 471 455	9 7 8	11436 12253 12413 13036 11533	425 429 4 7 4
73∋44	1 3	7	10475	3.4	362	1947 1948 1949 1951 1952	i I		3.3 3.3 3.9	227 350 337 513 393						

NLW YORK 210

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	BY YEAR OF FRESHENINGRECORDS FRO									for the Market Market					
DAUGHTER							RECORO AVERAGE BY SIRE BY I						YLARLY HE	-RO AVE	H AG I−
51KE OAUGHTERS NU. NU.	RECORDS NO.		TEST FCT.	FAT L8.	FRESH YEAR	RECORUS NU.	LB.	TEST PCT.	EAT LB.	RECORDS M	11 L K		RECOKOS NO.		
					1953	HOL 51	12340	3.7	459						
738851 3	5	13720	3.5	485	1953 1954 1955	2 2 1	15430 13720 14730	3.7 3.5 3.4	567 473 507						
739097 1	1	9620	3.5	333	1952	1	9620	3.5	333						
139212 56	217	11399	3.6	405	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	64 31 35 23 18 15 10 8 4 3	11264 11742 12192 12355 12643 13175 13935 14871 15318 14337 15268 15055	3.6 3.6 3.6 3.0 3.5 3.5 3.6 3.7 3.7 3.7	402 415 434 451 439 460 498 535 558 523 518	1 10 1 11 1 12 1 13 1 14 1 15 1 12	9370 0170 1570 2470 1410 3350 3560 2150 3280	535 367 426 418 378 421 460 436 451	1 1 1	12/31 12917 13211 12132	#73 #78 #45
741318 2	2	10895	4.1	14 14 14	1959 1960	1	10780 11010	4.0	429 458		1020 9450	385 323	1	10993 11554	398 419
741370 18	65	11566	3.5	398	1949 1950 1951 1952 1953 1954 1955 1956 1957	6 9 14 10 9 5 6 3 2	12707 10932 10774 11969 12354 11752 12238 10937 11900 12430	3.5 3.5 3.4 3.5 3.4 3.4 5.5 3.6 5.5	446 382 364 416 422 402 425 385 411 419	2 1/ 2 10 1 5 2 10 1 1/	2160 1755 0420 9910 0075 1870	461 462 412 363 399 433	2 1 1	11554 12862 12121 12273	429 483 457 403
741493 124	380	12007	3.9	471	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	43 72 68 54 48 37 27 15 11 3	11435 12217 12204 12712 12581 12842 12539 13427 12661 13490 17200 16050		446 482 484 505 491 496 482 514 496 512 678 613	1 16 2 15 2 16 2 1. 1 14 1 14	6640 6000 5225 6150 3635 4050 4880 3560	664 712 577 576 500 512 542 504	2 2 1	14187 13364 14410 13898	532 498 559 547
741914 4	8	14508	3.6	523	1947 1948	7	14381 18250	3.6	518 674						
745032 70	275	11135	3.7	415	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	137 32 29 15 16 11 8 7 6 5 4 3	11496 11019 12183 10737 111771 11482 11101 11714 11243 11930 11493 11493 11493 11493	3.6 3.6 3.6 3.6 3.6 3.6 3.5 3.5 3.5 3.5	429 416 457 392 423 403 392 423 387 411 470 430 413	1 10 1 8 1 10 1 8 1 8 1 8	0130 0710 8820 0500 8140 3050 9200 8480 1420 2230	539 576 264 539 279 274 507 266 599 436) 1 1 1	9548 10126 9450 10377	3.4 347 351 361 451
744661 9	24	11124	3.5	384	1947 1948 1949 1950 1951	15 3 2 3 1	10820 11123 13050 11007 8810	3.7 4.0 3.5	388 418 512 377 326						
747241 78	261	11595	3.5	406	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	50 45 36 23 31 26 22 15 5 2	10768 11728 12291 12742 13440 13673 13365 1213 14028 12685 14357 13865 13920	3.5 3.5 3.5 3.5 3.6 3.5 3.4 3.4 3.4	383 410 426 444 474 476 474 427 487 490 400 441	1 1.	2470	467	1	11271	417
747242 231	705	12397	3.5	430	1947 1943 1949 1950 1951 1952 1953 1954 1955	1 41 95 124 118 111 74 57	13810 13577 13213 12052 12219 13094 13053 12880 13159 13529	3.4 3.5 3.5 3.5 3.5 3.5 3.5	477 455 448 419 428 456 447 457	1 1 2 14 5 1, 5 1 6 1.	3460 1170 4245 3698 4534 4534 4122	513 376 486 488 499 501 511		12767 12181	

TABLE 15.--CAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKL NO.	DAUGHTERS NO.	RECORDS NO.				FRESH YEAR	KECOROS NO.		TEST PCT.		SOS-DAY (RECORDS NO.	MILK		YEAKLY HI KECORDS NO.	MILK	
						1957 1958 1959 1960	11	TE1N 14393 14846 15050 15590	3.4	493 503 504 502	5	14230 12514 13994	514 447 503	5 8 4	14933 12992 13661 13102	533 468 463 447
14044	1 2	ц	14582	3.9	545	1948 1952 1953 1955	1	9930 17500 19420 20780	3.5 3.5	403 616 682 763						
74681	7 24	79	11727	3.8	44 2	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 5 15 21 17 8 5 2 2 1	12165 1188 11188 11943 12570 11649 12622 11473 14185 11310 12290	4.0 3.9 3.6 3.8 3.1 3.6 3.6 3.6	400 466 430 456 472 434 454 417 532 423 458						
74920	1 1	2	8835	4.4	386	1947	2	8835	4.4	386						
75034	9 7	17	12838	3.7	468	1949 1950 1951 1952 1953 1954 1956	2 1 5 3 2 1	11260 13575 15320 12794 15843 18345 19960 18030	3.6 3.6 3.1 3.5 3.5	406 496 552 467 578 620 697 605						
75349	6 229	684	11911	3.5	4 lo	1948 1949 1950 1951 1952 1953 1954 1955 1957 1957	30 89 117 112 92 93 60 47 24 12	11799 12187 11790 12110 12670 12328 12131 12315 11845 13073 14345	3.5 3.5 3.5 3.5 3.5 3.4 3.5 3.5	407 429 412 425 438 434 417 425 412 457 439	1 1 2 1 2 2 3 2	11980 13330 12305 13000 11795 14110 13423 13730 13800		4 4 3 2	12184 12772 13894 12709	454 447 499 457
75510	1 150	390	11735	3.7	427	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	80 70 80 75 51 38 29 13 13 13	11693 12292 11290 11902 11952 11962 11653 12618 11518 10212 14903 14920	3.7 3.6 3.7 3.0 3.5 3.6 3.7 3.6	440 449 410 434 442 430 410 444 420 369 581	i 1 1 3	15710 14510 13070 13120 14433	526 505 487 466 536) 3 3	12557 11565 13432	417
75582	4 2	8	9913	3.5	347	1949 1950 1951 1952 1953 1954	2 2 1 1 1	10610 8415 11180 12580 9480 11800	3.0 3.6 3.7 3.9	327 305 405 470 368 447						
75050	2 3	В	4962	3.3	335	1947 1948 1949 1950 1951 1952 1954	 		3.5 2.5 3.5 3.6 3.7	242 245 222 285 371 392 435						
75662	6 3	10	12996	5.8	485	1950 1951 1952 1953 1954 1955	2 4 1 1 1	9060 13733 15160 13930 14970 14370	3.5 3.7 3.7	332 516 532 516 547 525						
75012	3 16	85	13221	3.6	481	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	25 10 7 11 9 8 7 5 3	11990 13390 16047 15336 15759 14501 14217 14112 14680 18580 14880	3.8 3.6 3.7 3.6 3.6 3.5 3.5	437 504 590 560 597 517 519 503 509 642 504						
75832	7 45	99	11560	3.4	386	1948 1949 1950 1951	20 28 21 12	12147 11646 12363 11713	3.4 3.4	406 398 423 380		9450 11060 11480	392	!	13178	416

TABLE 15---OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.	MILK LB.			FRESH YEAR	RECOROS NO.		TEST PCT.				FAT	YEARLY HE RECOROS NO.		FAT
						1952 1953 1954 1955 1956	HOLS 9 5 2 1	TEIN 11597 10340 10275 10500 10370		404 354 309 367 329						
758950	7	24	10531	3.5	366	1947 1948 1949 1950 1951	12 3 5 2 2	9837 10357 11356 14100 11520	3.5 3.7 3.5 3.5 3.7	344 382 372 486 420						
759193	ц	8	10620	3.6	379	1949 1950 1951 1952 1953	1 3 2 1	12810 10177 9950 11820 8860	3.5 3.5 3.6 3.7 4.0	417 353 352 459 357						
160679	2	3	9968	3.6	360	1949 1950 1952] 	8440 12030 10960	3.5 3.6 3.8	293 434 417						
760856	1	1	11050	3.5	383	1953	1	11050	3.5	383						
761977	1615	4715	12536	5.7	463	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	22 112 244 403 532 705 777 651 512 355 231 151 20	13017 13323 12706 12623 12753 12634 12583 12964 12864 13306 13323 13161 13495	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	469 469 465 471 465 464 478 479 492 491 489	5 13 27 62 91 96 120 135 162 134	14196 13558 13313 13047 12873 13314 12894 13317 12876 12994 12143	529 496 488 473 463 466 460 486 470 474	101 105 11B 139 119	1232 <i>T</i> 12602 12802 12436 1321 <i>T</i> 13577	445 456 466 455 482 489
762945	1	1	14250	3.4	47B	1949	1	14250	3.4	478						
764632	1	3	13140	3.5	463	1951 1952 1953	1 1 1	11690 15310 12420		404 551 433						
765379	1	1	10060	3.B	385	1952	1	10060	3.8	385						
766065	107	2124	11718	3.6	418	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 113 262 325 336 331 260 185 137 90 41 21	11459 11249 12112 11663 11617 11943 12161 12392 12749 12692 12344 12265 14023	3.5 3.6 3.6 3.6 3.6 3.6 3.5 3.4 3.4	419 397 431 419 417 427 435 442 450 445 423 422 504	2 4 7 6 9 11 10 8	13925 12878 12634 12568 12913 11943 11599 12144 12745	469 445 459 464	10 9 8 8	12333 11596 11844 12523 12521	442 425 418 460 459
768210	1	1	13360	3.3	439	1954	1	13360	3.3	439						
768460	1	2	13760	3.8	523	1948 1951		15410 12110		573 473						
764006	2	6	11105	3+5	387	1947 1948 1949 1950	2 1 2 1	9865 12130 11495 12800	3.3 3.4	360 391 389 452						
769170	24	57	14799	3.8	565	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 5 13	11530 14875 17725 177310 16180 16663 19547 12330 15330 14898 13379 15866	4.0 3.7 3.7 4.3 4.1 3.9 3.7 3.8 4.1 3.0	594 640 648 698 681 766 449	ц 5 3	12030 13785 14156 14400 15166	602 5 7 3 544	3	15053 15064 14255	5/9
769577	1	4	14403	3.7	537	1952 1954 1955 1956	1 1 1	16260 15720 13370 12260	4-1 3-6							
771427	1	3	9107	3.8	346	1951 1952	1		3.8 5.7							

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

213

	OAUGHTER	AVERAGE	8Y 51	R E		R	ECORO AV	LKAGE E	Y SIR	E BY	FRESHENING	YEAR				
SIRE (OAUGHTERS NO.	RECOROS		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCI.	FAI LB.	305-DAY RECORDS NO.		FAT	YEARLY H RECOROS NO.		FAT
						1953	HOL S	TEIN 9770	3.9	377						
771602	158	451	10695	3.7	393	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	45 100 82 78 53 44 26 16 4	10387 10717 11120 11325 11240 12023 10923 12243 11940 10900	3.7 3.7 3.8 3.7 3.7 3.7 3.7 3.7 3.5	380 396 416 424 412 440 399 451 425 374	2 3 4 2	12300 13160 13778 12290	436 477 510 420	3 2 3 3 1	13233 14655 13640 12161 13778	471 512 479 451 514
772360	2	10	11520	3.4	390	1951 1952 1953 1954 1955 1956 1957	1 2 1 2 1 1	13450 11310 11086 10735 11850 12580 13020 10930	3.4 3.5 3.8 3.3 3.0 3.5 3.1	412 376 391 405 388 380 423 342						
772531	30	76	10852	3.6	393	1947 1948 1949 1950 1951 1952 1954	50 6 1 5 3 1 2 2	10958 10868 11847 11524 11603 16060 14695 12925	3.6 3.6 3.5 3.5 3.7 3.7 4.0 4.0	394 387 420 401 426 595 594 513						
772753	1	1	8670	3.6	310	1947	1	8070	3.0	516						
77 52 22	45	144	11248	3.5	390	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	16 25 31 15 17 13 11 5 6 4	10058 11147 12387 12432 11122 10715 10636 12908 13085 1321d 20110	3.5 3.5 3.5 3.4 3.4 3.3 3.3 3.2 3.2	349 393 432 435 381 367 353 424 422 424 052						
775861	4. 1	163	11493	3.5	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	40 19 27 20 11 9 8 10 4	10982 11759 12023 12251 11927 13114 13551 13458 14340 14163	3.5 3.6 3.5 3.4 3.4 3.5 3.4 3.5	381 410 427 424 424 450 460 468 482 510 417	1	14310	466			
776442	1	i	13130	3.5	464	1951	1	13130	5.5	464						
(771177	549	1395	10717	3.6	387	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	10 78 125 200 260 225 185 140 80 45 21 11	9908 11148 10545 10589 10970 11152 11187 12074 1163 12521 12248 11395 9067		368 407 387 388 398 400 400 431 421 443 414 382 297	1 3 6 10 14 12 15 16 15	12470 11760 13247 13193 12251 13615 12981 12750 12437 11589 7480			12008 12143 12337 10954 11917 12135	445 457 395 428
777495	ł _ė	10	101/7	3.6	370	1947 1948 1949 1950 1951	1 2 2 3	8420 10740 9955 11955 10240	3.3 3.2 3.9 3.8 3.4	279 350 391 455 354						
778322	159	559	11885	3.5	415	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	141 80 73 57 42 39 38 33 18 20 9 6	11458 12110 12885 12680 11854 12601 12652 13271 13677 13270 14620 12670 13863	3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	403 427 448 439 411 441 432 457 480 456 495 440	2 1 5 4 5 1 5 3	11000 13280 12508 12165 13614 13920 11033	391 489 448 444 485 461	3 5 2 5 3	12016 12183 13789 11240 13440	437 493 412
778470	1	1	12660	3.5	443	1949	1	12660	3.5	443						
778551	96	287	12047	3.6	432	1947 1948	35 57	11506 11901		414 420						

TABLE 15---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

214

DAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUGHTERS NO.	RECOROS			FAT LB.	FRESH YEAR	RECORDS			FAT L8.	SOS-DAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAI
						1949 1950 1951 1952 1953 1954 1955	HOLS 54 45 31 23 20 13 7	TE1N 12841 12356 13065 12849 12752 13212 12604 13895	3.6 3.6 3.6 3.6 3.6 3.7 3.7	457 446 466 459 456 451 462 480						
778100) 56	207	12205	3.4	409	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	8 18 27 30 30 27 21 16 13 7	10936 11025 12496 12323 13130 13101 13830 12383 13465 13469 14624 15537	3.5 3.4 3.4 3.3 3.4 3.3 3.3 3.3 3.3 3.2 3.1	576 579 423 404 446 437 454 462 440 435 453		115y0 12d70	388 435	1	12273	412
77956	7 2	8	14584	3.8	544	1952 1953 1954 1955 1957 1958 1959	 	15000 11840 13780 13460 11240 13440 16390	3.7 3.4 3.5 3.6 3.6 3.9 3.6	555 405 456 467 405 533 593	;	14610 15570	563 560	1	14334 16023	562 60 y
780042	? 51	136	11812	3.4	405	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	20 30 22 21 13 9 4 5 3	11675 11859 11500 11461 12122 11858 13067 13046 14553 14405	3.3 3.5 3.6 3.5 3.4 3.4 3.7 3.6	386 410 410 401 419 398 438 473 512 509						
780230) 1	1	7530	3.8	289	1948	1	7530	3.8	289						
78045	5 3	7	13770	3.7	514	1948 1949 1950 1951 1955 1958 1959	1 1 1 1 1	17726 15120 14210 11350 8900 17890 17480	3.3 3.6 3.3 3.3 3.5 4.1 4.1	597 551 465 392 315 728 723	;	15470 15550	589 591	ļ	16285 16230	
78160	7 3	5	9962	3.6	361	1950 1951 1952	2 2 1	8725 9430 11730	3.6 3.6 3.7	314 338 432						
782352	2 1	1	10060	3.6	357	1949	1	10060	3.6	357						
7830 I	7 64	152	11172	3.6	395	1949 1950 1951 1952 1953 1954 1955 1956	25 44 23 19 16 10 7 5	11360 10784 11773 11625 11192 11262 12419 14204 16047	3.6 3.5 3.6 3.6 3.6 3.6 3.6 3.6	403 380 422 418 409 408 448 513 566						
78413	1 38	81	12092	3.7	444	1951 1952 1953 1954 1955 1956 1957 1958 1959	3 17 10 11 10 12 7 7	13100 11751 12612 11725 11501 12719 13163 13469 12593	3.6 3.5 3.6 3.8 3.6 3.7 3.5	476 425 444 424 430 456 484 467 449	1 2 3 4	10850 12320 12066 11983	377 430 428 423	1 2 3 4	11881 11020 10573 12767	415 387 380 450
78423	1 474	1384	12133	3.7	450	1948 1949 1950 1951 1953 1954 1955 1956 1957 1958 1959 1960	1 45 128 257 268 209 177 129 83 53 19	11660 11234 11629 11923 12380 12694 12337 13080 13670 12526 13371 8180	3.6 3.8 3.6 3.7 3.7 3.7 3.7 3.7 3.0 3.6 3.6	438 425 435 440 462 409 451 479 478 492 451 401 316	3 9 12 15 14 14 21 9	11127 12343 12039 11441 11691 11914 12786 12544 11740 12460 9050	389 427 437 406 421 430 460 453 413 448 323	16 14 21 9 9	11628 11270 12064 11201 12596 9461	399 404 450 400 453 340

TABLE 15.--OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE					ECORD AV		Y SIR	E BY	FRESHENING	YEAR				
SIRE O	AUGHTERS	RECOROS				FRESH	RECORDS	MILK	TEST	FAT	305-DAY (RECORDS NO.	CONTEMP MILK	. AV.	YEARLY H	RD AVE	RAGE FAT
NO.	NO.	NO.	L8.	PCT.	LB.	YEAR	NO. HOLS		PCT.	L8.	NO.	LB.	L8.	NO.	L8.	Lii.
784721	1	1	10490	3.5	363	1952		10490	3.5	363						
784779	34	95	12760	3.6	456	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	12 18 17 13 11 9 7 6	11818	3.4	432 438 510 493 496 468 458 471 506 393	2 3 1	12113 10310	420	1	12633 12339 11307 9189 13625	482 436 403 318 483
786552	58	202	12234	3.6	439	1947 1948 1949 1950 1951 1952 1953 1954 1956	91 24 24 16 17 10 10 6	12258 13315 12950 13363 13627 15647 14946 12858 13170 8420	3.6 3.6 3.7 3.5	440 476 471 491 484 564 532 434 470 289						
787322	1	14	11798	3.5	414	1947 1949 1950 1951	1 1 1	13260 12160 12410 9360	3.4 3.6 3.5 3.5	450 436 439 332						
78/323	292	836	12136	3.4	409	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	82 35 74 105 119 124 99 74 52 34 22	11315 11552 12722 12009 12041 12644 12234 12280 12605 12836 13262 14018 14216	3.4 3.4 3.4 3.4 3.4 3.4 3.4	585 591 431 406 408 425 417 418 453 445 456 454	1 1 2 2 3 3 5 6	16310 14310 13940 12095 13285 13020 14107 13356 12728 12155	564 531 466 498 495 486 481 468	4 4 5 5	12636 11418 13616 12099 12355	468 417 500 440 445
787641	2	6	9832	3.6	354	1947 1948 1949	3 2 1	8237 10670 12940	3.7	287 389 482						
788399	564	1595	11568	3.5	402	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	57 171 281 305 258 190 155 90 60 22	11486 11584 11464 11802/ 1205 12758 12503 12925 13833 14250	3.5 3.5 3.5 3.5 3.5 3.5	394 404 402 415 419 430 443 437 450 478 478	3	12280 12030 13045 13045 12478 12765 13936 13444 13023 13694 12302	490 440 465 461 457 501 482 466 496 453	9 8 11 8 6	12131 11946 12553 13144 12361	429 473 452 4 71 449
789916	3	5	10209	3.7	382	1952 1953 1954 1955	1 1 1 2	6380 10860 11340 11940		224 409 447 451						
790106	2	2	12660	4.1	521	1950 1953	1	11580 13740	4.2 4.0	486 555						
792129	87	240	11185	3.5	395	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	31 25	1003/ 11326 11497 11720 11710 11443 11216 11401 11363 11697 1222/ 12635	3.5 3.6 3.5 3.6 3.7 3.6 3.7 3.5 3.5	350 398 413 411 419 405 407 407 422 410 427 426	2	9310 10930 11270 11920 12345 13235		2 1 1 2	10829 12186 9592 11042	422 36 I
792315	212	569	10351	3.7	381	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956		10183 10223 10711 10884 11204 11516 11838 11698 12153	3.7 3.7 3.7 3.7 3.7 3.6 3.6 3.6	371 377 395 406 410 423 429 422 418 422 418	1	10780 13110 13310 11330	489 483	1	11630	4∠1
793004	6	15	1 2 872	3.6	###	1950 1951 1952 1953	1 1 2 2			379 366 293 386						

NÉW YORK

TABLE 15.---OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EXEED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAOGHTER AVERAGE BY STRE

SINE NO.	OAOGHTERS NO.	40. KELOKO2		TEST PLT.	FAT L8.	FRESH YEAR	KEGGKUS NO•		TEST PCI.	FAT Lô.	SÕS÷DAY RECORDS ≀O.		FAT	KECOKDS KECOKDS AFYKFA H		FAT
						1954 1955 1956 1957 1958	HOLS 3 1 2 1	TEIN 10005 14970 15320 11065 11916	4.0 3.3 3.0 3.6 3.9	397 475 547 393 459						
79025	8 I	1	16080	3.4	546	1951	1	16080	3.4	546						
79845	1 857	2578	11710	3.6	418	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	8 118 311 469 417 395 295 241 152 90 17	11096 11492 12336 11767 11515 11999 12039 12033 12328 12149 12961 13104 13554	3.6 3.6 3.6 3.6 3.6 3.5 3.5 3.5 3.5 3.5	375 412 424 424 432 429 425 434 428 436 432	1 2 7 8 8 9 12 11 10 8	14100 13545 14109 14201 14920 14411 13727 12000 13057 11095 12063	521 509 485 509 504 494 437 456 473 412	14 15 15 6	12857 12450 12968 13351 13022	454 446 473 471 484
79954	5 I	2	16090	3.1	501	1949 1951	1 1	17660 15120	3.1 3.1	527 474						
79964	5 1	1	6900	3.8	260	1953	1	6900	3.	∠60						
79954(5 12	2∠0	10788	3.6	384	1947 1948 1949 1950 1951 1952 1953 1954	78 39 35 21 17 13 0 7	10679 11165 12317 11806 10501 11689 12990 10659 8750	3.6 3.6 3.0 3.0 3.5 3.4 3.4 3.0	381 405 446 424 370 393 438 385 284						
80000	0 1	3	14617	3.6	532	1947	3	14617	3.0	532						
80001	5 22	54	11575	3.5	414	1948 1949 1950 1951 1952 1953 1954 1955	11 11 11 0 5 2 2 1	8240 12858 10273 10387 13352 11007 13780 11230 13330	3.5 3.6 3.6 3.4 3.3 3.7 3.0 3.2	285 470 365 386 449 358 506 402 432						
60024	5 1	1	14540	3.2	461	1958	1	14540	3.2	461						
80137	5 I	1	13730	4.0	551	1952	1	13730	4.0	551						
80 o 1 1	8 1	1	12220	3.6	443	1955	1	12220	3.6	443						
80533	2 I	1	15060	3.5	525	1952	1	15060	3.5	525						
60622.	2 1	1	7680	4.0	30 <i>1</i>	1949	1	7680	4.0	30 7						
80625	6 1	1	10590	4.0	.421	1959	1	10590	4.0	421						
80 7 55.	2 43	100	13253	3.6	480	1952 1953 1954 1955 1956 1957 1958 1959 1960	5 21 22 19 12 9 5 5	13302 12140 12465 12641 13188 13927 17610 16874 14805	3.6 3.6 3.7 3.6 3.6 3.5 3.6	484 442 453 462 490 501 620 622 536	3 6 6 5 4 9	14610 11777 13462 14598 14614 13800 14290	499 440 479 519 525 482 517 541	6 2 4 2 5	12766 1255 I 13865 12780 15038 14884	457 448 476 477 542 512
80867	8 114	327	11524	3.5	403	1950 1951 1952 1953 1954 1955 1956 1957	23 66 70 63 37 29 21 11	11235 11907 11773 12016 11524 12819 12042 12632 12120	3.5 3.6 3.6 3.5 3.4 3.4 3.7 3.7	396 424 418 418 399 440 434 468 392	1 2 4 0 4 4 4 9	9700 10325 12893 13068 12710 14805 12333 12958 10940	335 388 471 500 464 528 440 478 402	5 6 6 4	12064 12239 12604 10936	448 445 465 395
80886	0 1	2	7430	3.6	265	1952 1953	1	6720 8140	3.5 3.6	238 292						
80891	6 87	209	11054	3.5	384	1950 1951 1952 1953 1954 1955 1956	22 41 48 36 25 16 9	11382 11048 10851 11618 11514 11267 11823 13109	3.5 3.5 3.4 3.4 3.5 3.4 3.5	394 382 380 399 392 396 394 434	1 1	16870 11550 13350	648 392 524 455	1 2	12426 12235	45Z

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECURDS NO.		TEST PCT.	FAT LB.	305-DAY RECORDS NO.			YEARLY H RELORUS NO.		FAT
						1958 1959	HOLS 2 3	TEIN 14515 12693		476 424	1 2	10880 11695	406 425	1	12459 12219	400
81042	7 248	680	11121	5.7	413	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	28 125 149 122 89 66 46 26 22 4 3	11770 11203 11169 11125 11499 11273 11462 11855 12676 14125 12090	3.7 3.7 3.6 3.7 3.7 3.7 3.7 3.7 3.6 3.5 3.5	441 421 422 407 425 411 419 439 454 497 416	3 3 4 5 3 6 1 3	12407 12817 10820 10444 12517 11450 12247 13810 11217	445 427 411 368 434 412 435 524 416	5 3 5 1	11026 11274 11181 13571 12513	387 374 396 496
81129	2 1	6	13318	3.2	426	1947 1949 1950 1951	3 1 1 1	12650 13900 12850 15210	3.2 3.1 3.2	411 442 397 483						
b1174	3 1	14	15810	3.4	541	1955 1957 1958 1959	1 1 1 1	15120 16030 15220 16870	3.4 3.4 3.4	535 546 513 571				1	14421	517
81356	4 6	12	14476	3.6	512	1952 1953 1954 1955 1956 1957 1959	1 2 3 1 3	14200 13990 14663 19220 12530 17540 17900		460 504 549 620 479 568 603	ı	16110	611	1	16514	621
81391	1 86	254	13640	3.8	512	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	35 50 46 45 28 21 13 4	12953 13488 13716 14198 14309 15115 14460 13905 13448 10533 15270	3.9 3.8 3.7 3.6 3.6 3.7 3.5 4.1	500 507 512 520 526 546 546 518 474 415 520	3 3 2 2 2 2 3	16593 15943 16685 14055 14090 14457	638 631 581 538 534 528	3 2 2 2	12142 12672 14704 11932 12775	441 436 542 442 476
81514	3 1	1	15170	3.4	511	1957	1	1517∪	3.4	511	1	11020	384	1	12568	438
81523	6 571	1612	12057	3.6	430	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	69 259 324 241 224 186 125 84 55 33 10 2	11578 12129 12258 12535 12535 12717 12759 12929 12666 12212 12912 17515	3.6 3.6 3.6 3.6 3.5 3.5 3.5 3.5 3.5	411 440 440 438 448 450 455 451 447 426 458 570		11835 13510 13690 13173 12810 12560 13746 13240 12573 13370	418 518 481 478 475 420 406 483 446 486	3 0 8 2 2	12764 12520 12794 12699 13359	468 453 464 449 440
81704	da da	17	12851	3.5	451	1949 1950 1951 1952 1953 1954	2 3 3 2 4 2	9485 12437 14103 15815 13668 14305 16060	3.6 3.5 3.6 3.6 3.6 3.7 3.7	329 440 531 567 491 531 600						
81705	4 1	1	8216	3.6	297	1950	1	8210	3.6	297						
81707	6 2	5	13639	3.5	471	1951 1952 1954 1955		13860 11390 14990 11610	3.4	525 389 497 420						
81845	9 1	2	11180	5.7	411	1952 1953		12436 9930		451 371						
8200 ხ	6 4	6	11457	3.6	412	1749 1950 1951 1952 1953 1955	1 1 1	11540 10360 11250 12530 13290 11570	3.9 3.7 4.0	383 408 416 496 472 397						
o2075	2 398	1190	11250	3.7	410	1947 1948 1949 1950 1951 1952 1953	162 204 163 145 121 67	1060 2 11107 11999 11716 11961 12295 12751 12539	3. / 3. / 3. 7 3. 7 3. 6 5. 6	339 405 442 430 440 447 464						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

51KE ND.	DADGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT L8.	FRESH YEAR	RLCORDS NO.		TEST PCT.		305-DAY RECORDS NO.		FAT	YEARLY H RECORDS NO.		FAT
						1955 1956 1957 1958 1959	HOLS 42 21 12 2 2	TEIN 12855 12482 13635 11605 13620	3.6 3.7 3.5 3.5	463 458 503 401 470		13960 13200	516 490	1	13069	400
82164	4 1	1	16390	3.4	552	1955	1	16390	3.4	552	·	1.72.00	470	·	13007	433
82206		1	16460	3.8	623	1959	1	16460	3.8	623	1	12920	490	1	13254	507
82283	7 14	28	12712	3.8	474	1952 1953 1954 1955 1956 1957 1958 1959	1 7 5 5 5 3 1	9860 11600 11042 13322 14208 15603 14630 14230	3.6 3.8 3.6 3.6 3.8 3.7 3.8 3.8	354 440 404 481 526 576 549 549	1 1 2 1 1	13160 12810 14710 14750 14050	512 510 557 543 539	1 2 2 1 1	14661 13434 13680 14105 14344	506 500 516 511 556
82291.	3 645	1526	12591	3.6	457	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	9 108 145 204 203 209 196 164 128 92 61	12319 12202 12487 12937 12893 12487 12921 12801 13210 13299 13697 11619		458 450 453 472 469 450 466 463 471 482 496 425	2 3 2 7 16 17 25 40 69 54 7	11470 10960 13610 13434 12101 14346 12962 12820 12895 12505 11767	404 396 548 479 437 518 466 466 469 454	24 29 37 57 44 5	12999 12478 12374 12736 12749 13815	465 447 455 467 461 506
82305	5 9	17	11811	3.5	409	1952 1953 1954 1955 1956 1957 1958	1 3 5 2 3 1 2	7100 12763 13250 16755 9240 6140 9855	3.2 3.5 3.4 3.4 3.9 2.9 3.5	226 454 450 552 360 177 330	1 1 1	9890 9740 10220 9290	328 334 339 299	1	10126 9450 10377	349 331 361
82359.	3 6	20	12311	3.6	436	1950 1951 1952 1953 1954 1955 1956 1958	3 4 4 2 2 1	11993 14570 13038 13535 9575 9930 9240 12630	3.6 3.6 3.6 3.8 3.8 4.0 3.7	428 502 464 481 364 373 370 474	1	12180	43∠	1	14944	521
824 33	5 7	11	12893	3.6	464	1951 1953 1954 1955 1956 1957 1959	1 1 1 3 3 3 1	14650 13460 11790 11930 11403 14257	4 · 1 3 · 7 3 · 6 3 · 6 3 · 5 3 · 5 3 · 6	594 503 424 456 396 510 388	ı	14150	522			
82454	0 1	1	12910	3.6	467	1952	1	12910	3.6	467						
82431	3 7	20	11645	3.7	423	1947 1948 1949 1950 1951 1952 1953	6 3 4 3 2 1	10630 11327 11688 10680 12695 13710 12640	3.6	384 413 450 368 452 497 447						
82643	5 1	2	11060	3.7	407	1953 1954	1	10890 11230	3.7 3.7	400 414						
b26/ I	0 343	946	11025	3.6	396	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	60 119 135 121 143 119 88 68 37 21	10650 10692 11553 11349 11288 11741 11609 11586 12370 12739 12007 15720 11927	3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	383 385 413 413 406 424 419 416 447 455 417 569 420	1 3 3 4 4 4 2 3	8380 13017 12390 13455 12540 12950 13010 9713	273 472 465 505 457 477 467 364	4 4 4 2 2	13268 11832 12979 12312 11314	480 423 474 437 402
82675	0 2	6	14100	3.5	498	1953 1954 1955 1956 1958	2 1 1 1 1	14130 16320 18810 15160 13710	3.5 3.9 4.0 4.0	500 642 755 614 546	1	11650 12480]]]	13189 15271 13004	491 592 483
62703	3 4	13	12123	4.1	490	1951 1952 1953 1954 1955 1956 1957	2 1 2 2 2 1	13575 13135 10580 12780 14455 14240 12740 10430	4.0 4.2 3.7 3.8 3.6 3.6 3.5 4.6	535 536 387 489 551 506 443 462	1	15320	580	l	14927	566

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BRILD, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTER				103 IN		ELURU AV		Y 51R	E BY	FRESHENING	YLAR				
SIRL	DAUGHTERS	RECORDS	MILK	TLST	FAT	FRESH	RECURUS	MILK	TEST	FAT	JOS-DAY RECURDS	CUNTEMP	. AV.	YEARLY H	ERO AVE	RAGI FA
NU.	NO.	NU.	L8.	PCT.	LB.	YEAR	NO. HOLS		PCT.	LU.	NO.	Lu.	LB.	NO.	LB.	L8.
8272∠6	33	91	12238	3.6	431	1950 1951 1952 1953 1954 1955 1956	11	11946 11353 12027 11272 12061 12316 12301 13106	3.5 3.6 3.4 3.6 3.6 3.6	416 404 427 390 434 446 442 459	2 2 2	12870 11405 11130	430	1 2 4	12099 12377 12036	
8275 12	10	16	13877	3.6	504	1951 1952 1953 1954 1957 1958 1959	2 3 1 2 1 3 2	17490 17565 14417 17930 16255 11500 11247 13470	3.6 3.8 3.8 3.8 3.6 3.6	618 654 551 680 596 435 392 485	1 3	12110 14980 11050 12790	430 524 385 435	1 1 2 1	1298? 13396 11860 1322?	425 458 411 452
827/43	80	199	10935	3.6	394	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 10 42 52 35 26 17 10 3	10480 10651 10690 10772 11099 11994 12182 12784 12873 12983	3.5 3.7 3.6 3.6 3.6 3.6 3.6 3.6	349 369 397 389 399 432 437 457 472 435	1 2 1 1 3 3 2 3	11720 12443 13253 13230	488 510 561 484 460 492 479 490	2 3 3 1 3	13593 12383 12626 13985 12848	
d28522	1	4	13808	3.4	462	1953 1954 1955 1958	1 1 1 1	12880 18900 11670 11780	3.4 3.3 3.3 3.4	437 624 389 399						
828821	3	12	7344	3.6	263	1952 1953 1954 1955 1956 1957	3 2 2 1	8203 7215 8250 7340 6680 6020	3.8 3.5 3.5 3.4 3.8 3.6	316 251 288 250 254 217						
829220	338	6b3	12599	3.6	45u	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 16 41 82 99 107 80 95 86 61	12563 12468 12770 12695 12479 12448 12758 12895 13050 13959 13326	3.6 3.5 3.6 3.6 3.6 3.5 3.6 3.5 3.6	446 441 448 453 446 439 454 450 470 502 471	1 2 4 7 10 15 24 73 60	10400 11345 11475 12314 12030 12913 12753 12647 12956 14225	399 417 439 449 453 470 461 455 474 528	8 12 26 59 47 5	11802 12393 12035 12498 13161 13902	
829607	1	5	8780	3.4	299	1952 1953 1954 1955 1957	1 1 1 1	6730 9800 9300 11740 6330	3.5 3.3 3.4 3.4	237 327 308 405 220						
8300 o 5		1	14240		548	1958	1	14240	3.8	348	1	15030	560	1	14900	56 I
830∠69	800	1920	11609	3.5	409	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	7 92 240 347 372 316 242 155 76 60 7	10804 11421 11826 11587 11744 12043 12029 12759 12873 12807 12427	3.4 3.6 3.6 3.5 3.5 3.5 3.5 3.5 3.5	303 411 420 410 419 421 421 441 441 445 444	2 6 16 23 28 37 46 50 58 7	12036 12482 12690 12821 12162	472 453 465 459 472 444 446 452 458	32 37 40 39 48 6	12069 12257 12209 11920 13183 12419	435 481
830593	405	1031	11943	3.5	4 17	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	42 75 151 210 174 143 98 58 38 22	11165 11879 11761 12069 12076 12543 12373 12449 12820 14466	3.6 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	399 424 416 426 421 438 428 425 438 500	3 5 9 11 9 15 25 21	12252 12756 12376	417 388 410 459 447 454 452	12 11 14 22 18	10939 12331 11293 11982 13832	438 463 432
830714	2	7	11537	3.9	442	1953 1954 1955 1956 1958	2 1 2 1	12565 13510 9895 11290 10370	7.د	481 513 595 420 363						
b31073	71	169	13502	3.6	480	1952	6	13078	5.6	469						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--KECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE I	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YLAR	RLCOROS NO.		TEST PCT.	FAI LB.	305-DAY (RECUROS NO.			YEARLY HI RECORDS NO.		FAT
						1953 1954 1955 1956 1957 1958 1959	HOLS 32 40 50 26 18 11 6	TEIN 14069 14050 14031 12279 13104 12363 13372	3.6 3.6 3.6 3.6 3.5 3.5 3.5	498 504 506 438 401 425 463	5 3 9 7 5 3 5	11404 13277 12884 12214 12706 10797 10948	411 465 466 446 470 390 398	7 5 4 5 4	11619 12060 11494 11996 12053	419 435 424 438 437
831870	1270	2439	12633	3.6	449	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	26 67 156 216 251 329 473 387 275 231	11679 12492 12608 12451 12278 12699 12562 12852 13354 13438	3.7 3.6 3.6 3.6 3.6 3.6 3.5 3.5 3.5	430 446 451 447 440 455 449 455 471 474	1 1 5 15 20 29 83 154 224 223 24	14770 12170 14652 13346 13557 13960 13020 12611 12846 12773 12252	535 523 541 472 489 493 468 454 464 463 440	34 82 136 189 185 22	12438 12367 12174 12573 13114 13077	44.9 444 455 476 473
832235	150	399	10621	3.7	388	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	8 43 80 85 67 40 33 21 11 7	11578 10604 10880 11225 10751 10450 11672 11794 12290 13293 13238	3.7 3.6 3.7 3.7 3.7 3.6 3.6 3.6 3.6	429 392 395 415 392 389 424 428 440 470 459	1 1 3 4 4 4 5 2	13570 12720 11:37 11455 13300 12345 13212 12705	442 423 399 437 464 443 481 461	3 4 4 2	10722 11898 12320 13146 13222	374 415 428 473 475
832735	2	7	12428	3.4	416	1953 1954 1955 1956	2 2 2 1	12235 12650 12290 13580	3.6 3.3 3.3 3.2	431 417 400 436						
832754	60	153	10416	3.8	390	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 23 36 24 22 14 12 10 5 4	10690 10852 10562 10294 9658 10432 104369 9594 13345 13400 10980	3.8 3.7 3.8 3.6 3.7 3.8 3.6 3.6 3.6 3.6 3.6	404 402 399 372 359 391 378 408 364 432 513 435	 	11300 11230 11970 14150	43 / 446 476 523	1 1	11053 12677 13494	420 465 517
833599	10	18	12635	3.6	447	1949 1950 1951 1952 1953 1954 1955 1956 1958	1 1 1 2 2 2 2 2 2 2 2 3	12070 8950 13520 10260 13125 13805 13735 12220 15090 13237	3.2 3.5 3.4 3.5 3.5 3.5 3.5 3.6 3.3 3.4	385 310 459 355 453 472 516 396 512 465	1 2	11020 10995	384 388	1 2	13396 11729	458 406
834119	1	1	15550	3.5	552	1958	1	15550	3.5	552	1	10010	347			
834222	856	1662	10778	3.6	387	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 94 272 389 390 305 200 122 62 39 4	8958 10904 10970 10857 10706 11163 11293 11807 11920 12340 15083	3.6 3.6 3.6 3.6 3.6 3.6 3.5 3.5 3.5	323 394 399 390 383 396 403 412 421 428 530	5 10 17 22 26 33 44 35	14070 13700 12893 13520 13080 12801 12198 12500 13560	481 471 450 481 473 456 435 451 506	23 25 27 38 32 3	12619 12849 12728 12247 12926 13632	44 / 456 457 438 465 501
835302	2	2	13070	3.5	444	1951 1955	1	15630 10510	3.2	502 385						
835921	93	160	13216	3.6	472	1954 1955 1956 1957 1958 1959	14 58 38 26 14 9	13308 13193 12633 14086 13908 12514 13780	3.5 3.6 3.6 3.5 3.6	462 474 456 501 500 454 510	2 5 1 11 13 9	12300 13772 13133 13459 13195 13333 12540	422 482 463 470 475 489 462	4 5 6 9 6	12778 12337 12328 12016 13336 12818	
836260	1	1	13070	3.2	412	1953	1	13070	3.2	412						
836709	18	33	11829	3.7	438	1952 1953 1954		13416 11960 11710	3.1		1		584 654			

TABLE 15.--OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY SKEED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8Y 51H	₹ L		ĸ	ECORU AV	RAGE 6	Y 51R	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.			TEST PCT.	FAT L8.	FRESH YEAR	KECOKOS NO.		TEST PCI.				FAT	YEARLY HI KLCOKUS NO.	MILK	
						1955 1956 1958	2	TLIN 13443 13065 12860	3.7 3.8 3.6	502 499 469	1	13790	511	1	13135	487
83/02	5 3333	5442	11996	3.8	458	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	25 91 173 336 414 501 636 741 1073 1296 156	11376 12006 11824 12033 11801 11954 1248		454	4 21 38 53 100 338	12600 11153 12885 12808 13344 12639 12599 12689 12754 12467			12194 12166 12296 12532 13004 12953	
837∠3	1 1	5	13300	3.3	436	1953 1954 1955 1956 1957	1 1 1 1	14030	3.6 3.4 3.5 3.1 5.0	426 444 461 457 394		9600 11500 13040 13970 12530	375 451 508 532 451	1	12437 12731 13080	441 439 471
837456	0 4	8	13748	3.5	479	1953 1954 1955 1957	1 3 3 1		3.5 3.6 3.6 3.4	483 457 522 545						
837,89	9 278	636	12199	3.4	#03	1950 1951 1952 1953 1954 1955 1956 1957 1956 1959 1960	6 63 83 102 133 97 70 37 27 15 3	12666 12464 11961 12603 12947 13256 13132	3.4 3.4 3.4 3.4 3.4 3.4 3.5 3.3 3.2	387 407 425 421 401 421 437 437 437 482 418	4 8 9 8 7	14380 11783 11714 13020 12606 12533 12082 12293 7340	418 434 474 456 441 433 438	7 9 8 16 13 2	11690	447 434 418 472
83923	2 2	2	10620	5.3	353	1948	2	10620	3.3	353						
8401 43	2 20	52	11829	3.6	434	1947 1948 1949 1950 1951 1952 1953 1954 1955	1 10 9 11 5 5 4 2 2	10700 11994 13874 11856 10603	3.7 3.6 3.6 3.6 3.6 3.7 3.7 3.7	572 413 388 430 508 422 367 443 382 458						
84265	2 1	2	12000	3.7	4 38	1952 1954	1	12160 11840	3.8 3.5	460						
84287	6 3	ц	9868	3.5	343	1952 1954 1955	1 2 1	9090 9720 9980	3.2 3.6 4.1	290 342 408						
64293.	3 1	Ħ	8043	3.5	285	1952 1953 1954 1956	1 1 1	8990	3.5 3.6 3.6 3.3	353 323 335 127						
84412	2 33	49	13131	3.6	501	1955 1956 1957 1958 1959	9 8 12	9100 12162 13874 13548 13456 13565	3.8 3.5 3.7 3.9	507 519	2 7 12	13180 14480 13123 12805 12510	530 487 480	3 8 11	12284 12241 12432 13356 11740	446 455 495
84427	6 3	6	10291	3.7	381	1953 1954 1955 1956 1957 1958	1	11330 12410 6400 10880 9440 8520	3.4	422						
84569	9 2	4	11270	3.4	374	1948 1949 1950	1 2 1	13520 10680 10200	3.1 3.4 3.5	422 359 354						
84574	7 3	4	13217	3.6	477	1956 1957 1958 1959	1 1 1	14170 13250 13690 12250	3.7 3.7 3.5 3.6	528 491 479 442	1 1	16250 13240 13790	596 468 499	1	12818 12404 13832	457
84596	8 2	5	13462	3.5	473	1952 1953 1954 1955 1957	1 1 1	10550 12100 10710 11730 15650	3.3 3.3 3.5	344 405 352 415 567						
84631	5 41	105	10156	3.7	375	1947	16	8853	3.7	327						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	OAGOTTER	AVERAGE	D1 311			,	LUGIND AT				NE SILE III					
SIRE NO.	UAUGHTERS NO.	RECOROS NO.		TEST PET.	FAT LB.	FRESH YEAR	RECORDS ND.	MILK LB.			305-DAY RECURDS ND.		FAT	YEARLY H		FAT
						1948 1949 1950 1951 1952 1953 1954 1955 1956	HOLS 14 16 11 7 7 9 8 10 5	761N 9521 9971 9907 10879 10646 11734 12134 11485 13036 12530	3.7 3.7 3.6 3.6 3.8 3.8 3.7 3.7	351 365 378 395 403 445 454 427 471 471	1 1 1 1	10740 12970 11890 16910 13900	449 503 475 696 547	1	10235	368
846425	5 1197	2136	12994	3.6	468	1952 1953 1954 1955 1956 1957 1958 1959 1960	92 167 238 197 226 327 447 398	13091 12316 12583 13053 13014 12993 13511 13017 13513	3.6 3.6 3.6 3.6	470 446 456 471 468 462 487 490 487	6 14 25 27 58 139 389 374 41	13722 12981 13045 13328 12640 12923 12830 12872 12724	473 487 466 469 467	33 50 125 337 307 39	12104 12617 12550 12653 13190 13431	438 454 458 459 480 492
846979	9 92	112	11868	3.7	433	1955 1956 1957 1958 1959 1960	18 28 28 29 5	11620 11158 11580 12026 12423 11706	3.8 3.0 3.7 3.7 3.6 3.4	439 403 426 441 451 397	13 24 29 5	13525 12798 12683 12690 11392	486 459 478 471 406	12 22 18 5	12358 12316 12839 12913 12550	443 449 473 471 447
84757	9 2957	5/33	11795	3.7	439	1951 1952 1953 1754 1955 1956 1957 1958 1959 1960	64 335 596 808 811 863 807 773 602 74	11650 11712 11635 11738 11996 11820 12061 12465 12907 13118	3.8 3.8 3.7 3.7 3.6 3.7 3.7 3.7	443 440 436 437 448 442 448 464 478 485	6 17 57 79 140 289 647 578 66	12068 12727 12879 13274 12650 12728 12590 12604 12769	448 465 472 483 463 460 458 460 462	83 127 259 548 472 56	12334 12463 12291 12440 12956 13294	448 454 447 452 470 484
84996	9 1	1	14700	3.7	547	1950	1	14700	3.1	547						
850291	3 40	70	127∀3	3.8	485	1954 1955 1956 1957 1958 1959	12 19 11 - (11 10	11965 13325 12888 12809 12118 13361	3.9 3.8 3.8 4.0 3.8 3.7	471 507 487 510 455 493		11856	468	2 1 3 6 6	12862	465 433 510 469 480
85206.	3 1	3	11397	3.6	416	1952 1953 1954	1 1 1	9840 10230 14120	3.4 3.3 4.0	339 340 568						
852201	В 4	10	12644	3.3	416	1951 1952 1953 1954 1957	1 3 2 1 1 2	14130 12610 13816 9490 17030 12435	3.1 3.5 3.5 3.5 3.5 3.5	440 442 484 534 604 572	1	9430	335	1	9123	316
85271	4 1	1	8210	3.8	312	1954	ì	8∠10	3.8	312						
85371	7 82	236	11447	3.8	437	1951 1952 1953 1954 1955 1956 1957 1958 1959	27 51 45 36 30 22 13 6	1153z 11437 11618 11374 12146 12517 13345 14022 12350			2 2	12240 11475 13425 11940	399 485	2 2 3 2 4		459 445 438 479 502
85421	0 9	14	11818	3.7	432	1952 1953 1954 1956 1957 1958 1959	4 3 2 2 1 1	10590 10515 13160 7530	3.9 3.6 3.5	403 373 371 487	1	12220	456	1		
B5429	8 3	8	12055	4.2	501	1953 1954 1955 1956 1958	2 1 2 2 1	11285 12860 12145 12940 14470	4.3 4.2 4.2	555 508 541						
854/2	3 47	111	12032	3.7	440	1952 1953 1954 1955 1956 1957	5 23 25 20 14 1	12203 12764 13375 13716 13547	3.7 3.6 3.6 3.7	454 463 482 510	2 2 2	13010 10060 12265 11645 11780 12240	351 457 424	3	11303 12204 12430 11447	452 450

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	8Y YEAR OAUGHTER				KOS FR	SIHT MOS	STATE ON	LY			FRESHENING					
SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.		FRESH YLAR	RECOROS NO.	MILK	TEST PCT.	FAT L8.	305-DAY RLCOROS NO.	CONTEMP MILK LB.	FAT	YEARLY H RECOROS NO.	ERO AVE MILK L8.	RAGE FAT L8.
						1959 1960	HOLS 6 2	TEIN 11067 11010	3.5 3.8	388 414	5 1	12318 9690	442 347		12989 12917	50 3 48 3
85 53 5	5 11	45	12149	3.6	435	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1959	7 6 5 4 5 4 4 2	11966 10938 14358 12148 13280 12168 13370 14000 15440 14960 17850 11940	3.6 3.5 3.6 3.5 3.6 3.6 3.6 3.6 3.7	436 387 512 430 457 436 484 494 548 535 662 438	1 1 1 1	15800 13460 13930 13120 12190 10010	578 488 485 485		12557	
85535	I 600	1572	11646	3.5	408	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	44 81 130 132 143 169 212 205 171 139 76 39 27	11415 11739 12473 12168 11673 12094 11844 11758 11968 11833 12081 13532 13721 12585	3.6 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	398 416 437 427 409 428 415 410 417 417 471 463 406	1 2 2 3 8 13 16 17 22 29 25	11470 13240 12840 13120 13140 12524 11956 12863 12552 12544 12391 12728 11233	560 499 462 471 450 425 470 453 447 445 452	18 21 28 21	12140 11723 11886 12706 12847 12147	419 429 457 462
85 6 7 23	3 21	66	12401	3.6	437	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	13 6 9	14580 12732 13462 13327 12842 13370 12936 12935 13835 13030 8920	3.5 3.6 3.6 3.4 3.5 3.4 3.5	476		8280 11290		1	10889	387
85726	9 3	7	12838	3.9	50∠	1954 1955 1957 1958 1959 1960	1 1 1 2 1	10910 11990 11150 13025 15450 14000	3.8 4.1 4.0	456 451 458 510 569 575	1	13865 11630 14060			14552 10769 15467	391
85748	? I	4	15203	3.7	563	1952 1954 1955 1957	1 1 1	15380 16590 15790 13050	3.7 3.8 3.7 3.5	576 623 588 463						
85841	2	5	11595	3.4	384	1954 1955 1956 1957	2 1 1 1	10550 14300 12990 12720	3.3 3.2 3.5 3.4	345 458 449 434						
8584 1	3 1402	2693	12040	3.6	437	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	120 213 283	10980 12603 11919 11877 11807 11747 12198 11870 12332 12583 12790 12891	3.6 3.6 3.6	430 430 429	2 5 13	11955 13250 12898 12592 12596 13211 12465 12341 12695 12639 12849	511 456 462	27 52 145 292 272 33	12673 12282 12115 12443 12809 13223	460 437 444 448 464 487
85869	7 6	22	9776	3.6	351	1950 1951 1952 1953 1954 1955 1956 1957	4 4 5 3 2 1 1 1	8653 7213 9286 10060 10715 10750 11190 10660 14570	3.7 3.7 3.5 3.5 3.5 3.5 3.7 3.5 3.6 3.8	315 263 322 344 366 395 387 389 553	1	15600	597	1	16023	595
85915	9 1	1	13330	3.4	448	1951	1	13330	3.4	448						
85921	5 55	118	11086	3.7	407	1950 1951 1952 1953 1954 1955 1956 1957	7 29 33 10 13 8 6 2 2	11729 11294 11270 11797 11312 11710 9552 11650 14170	3.1 3.7 3.6 3.7 3.4 3.5	425 414 422 436 410 433 326 409 532	2	14570	533	2	14780	549

859238 2 3 12270 3.4 402 1953 2 12410 3.4 401

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL OREGOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHLNING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY STRE

SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.		FRESH YEAR	RECURUS NO.		TEST PCT.	FAT L8.	305-DAY RECORDS NO.		FAI	YEARLY HE RECORDS NO.		FAT
						1954	HOLS I	TEIN 14920	3.0	454						
85956	5 1	2	11370	3.8	424	1950 1959	1	10540 12200	3.7 3.8	388 459		12550 12160	449 457		12273 11859	
86060.	3 1	6	164//	3.8	618	1951 1952 1953 1955 1957 1958	1 1 1 1 1	15220 15800 17520 16000 17550 16770	3.7 3.7 3.6 3.7	590 584 644 610 654 628						
86076	8 1	1	13040	3.7	480	1959	1	13040	3.7	486	1	13/50	508			
86224	8 734	1740	11980	3.6	425	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 101 263 385 352 276 188 97 68	9540 11904 11709 11689 12466 12667 13184 13723 13601 13787	3.5 3.5 3.5	340 432 420 414 444 461 461 480 481	17	13405 12718 12737 13407 12641 13066 12601 12994 13690	522 452 461 495 462 478 463 476 483	46 54 55 63 50 7	12696 12569 12696 12416 13275 13586	461 458 463 447 486 491
86310	0 28	58	13036	3.7	478	1952 1953 1954 1955 1956 1957 1958 1959 1960	3 11 16 10 0 5 4 2	12670 13539 13928 14237 11607 12056 13603 9520 7950	3.4 3.6 3.6 3.7 3.8 3.9 3.9 3.9	432 495 500 529 437 471 524 364 273	1 1 1 1 4 1	14540 12460 14100 13350 13175 12590 17360	636 560 541 485 461 462 653	1 1 2 3 1	12350 13636 13985 11972 11129 12982	488 517 526 424 400 477
86375	6 213	407	12121	3.7	цц7	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	10 12 37 47 57 77 67 58 40 2	12144 12949 12367 12403 12224 12151 12350 12415 12264 12485	3.7 3.8 3.8 3.7 3.7 3.7 3.6 3.8 3.5	451 489 466 460 449 450 456 452 459	1 2 3 5 9 19 23 45 37	16/90 14360 11320 12422 12617 12811 12779 12532 12410 13100	651 562 512 486 479 464 457 457 457 454	9 13 20 38 26 2	12598 12885 11860 12203 12831 13423	465 469 442 441 470 501
86431	8 43	84	12115	3.7	451	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 2 7 17 11 11 9 8 8	14840 9985 12046 12919 12295 12255 11719 12499 14273 10930	3.7 3.8 3.7 3.6 3.7 3.6 4.0 3.7	554 370 456 477 447 456 425 498 525 411		13600 14085 15835 17825 14342 13578 13340	464 497 561 633 548 515 480	1 1 1 5 6	14661 15467 15206 13056 13952 14497	506 559 548 494 539 557
86532	3 161	191	12109	3.8	459	1956 1957 1958 1959 1960	27 43 100 17	12410 12445 11982 12226 11608	4.1 3.8 3.8 3.8 3.7	510 474 461 462 431	13 42 98 15	12109 12731 12705 128d3	459 472 469 475	12 37 80 14	12661 12379 12737 13490	471 455 469 497
86532	5 50	107	12203	3.6	439	1952 1953 1954 1955 1956 1957 1958 1959 1960	3 11 22 21 20 10 13 5	10713 12453 12616 12398 12758 13294 12570 11338 12175	3.6 3.6 3.7 3.6 3.5	402 454 453 445 466 479 445 403 419	2 3 5 3 8 5 2	12740 12170 12246 11686	389 429 506 474 435 419 403	3 4 7 3 2	11717 11919 11636 11934 12517	427
86551	3 5	9	12905	3.9	498	1954 1955 1956 1957 1958	1 3 2 2 1	13090 11980 12545 14675 15550	3.8 3.7	486 455 467 595 577						
86606	3 13	34	11797	3.7	434	1952 1953 1954 1955 1956 1957 1958 1959	3 6 9 7 5 1 2	11850 12153 12141 11447 9582 12280 14640 15540	3.6 3.8 3.9 3.7 3.8	421 433 461 442 353 468 497 513	i 1	14000 14340	509 549		14693 14846	
86614	2 6	14	11097	3.7	408	1950 1951 1952 1953	2 1 1	9080 12700 14760 14060	3.7							

TABLE 15.--DAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

225

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KECOROS NO.		TEST PCT.	FAT L8.	305-0AY RECURUS NO.		FAT	YEARLY H RECORUS NO.	MILK	RAGE FAT Ld.
						1954 1955 1956 1957 1958 1960	HOUST 1 2 1 1 3 1	TEIN 15510 11615 11780 14900 12863 13360	3.7 3.9 3.8 4.5 3.6 5.4	571 457 443 673 464 453	2	14050 13520	468 481	2 1	11990 13516	417
867412	2 1	1	13060	3.8	494	1953	1	13060	3.8	494						
867523	3 1	1	14910	4.0	596	1957	1	14910	4.0	596						
867648	3 1	4	9835	3.5	348	1954 1955 1956 1957	1 1 1	10250 10480 10750 7860	3.5 3.5 3.6 3.5	359 372 384 278						
869394	1	1	7380	3.4	249	1958	1	7380	3.4	249	1	14460	548	1	15511	596
869473	3 2	7	13039	3.5	459	1952 1953 1954 1955 1956 1957	1 1 1 2 1	13660 13080 12660 14375 14440 10570	3.6 3.8 3.3 3.7 3.7 3.7	498 494 424 523 532 387						
870458	8 88	248	10844	3.6	388	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 25 40 60 43 33 21 14 7	7965 10366 10757 10970 11241 11957 11841 12614 13674 13853	3.1 3.6 3.6 3.6 3.6 3.7 3.6 3.7	250 374 386 400 400 428 435 451 494 503	3 2 3 1 2 1 2	12967 13430 13477 12840 12905 10880 11045	455 492 489 445 437 386 381	1 1 2 1 3	1405n 14628 13195 11467 11699	485 522 475 401 4∠5
870701	2	2	8730	3.7	322	1959	2	8730	3.7	322	2	11130	398	2	10927	346
870736	97	206	12198	3.8	465	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 20 15 15 15 43 33 21 19 13 5	12753 12303 11849 12684 12934 12243 13132 13340 14036 12400 13356	4.0 3.9 4.0 3.9 3.8 3.8 3.8 3.9 3.9 3.9	510 472 467 490 484 455 499 508 537 480 483	1 1 1 2 7	13170 15080 14440 15045 13309	508 613 556 561 497 498	5 9 5	12703 12879 14288	464 478 529
871121	1	1	7960	3.3	263	1952	1	7960	3.3	263						
874187	1	1	11980	3.7	440	1953	1	11980	3.7	440						
874306) 1	1	12590	3.2	399	1958	1	12590	3.2	399	1	9820	355			
876045	; 4	4	9863	3.8	371	1959 1960	3 1	9610 10620	3.8 3.7	364 390	3 1	11190 11110	40 I 394	3 1	10856 10998	393 378
876262	2 1	6	10383	3.7	385	1948 1949 1950 1952 1953 1954	1 1 1 1 1	8930 10600 12020 8390 10870 11490	4.0 3.7 3.7 3.4 3.7 3.7	356 393 445 287 407 422						
877490) 10	28	11494	3.6	412	1951 1952 1953 1954 1955 1956 1959	3 6 7 5 2 3 1	10703 12535 11671 12200 12240 12183 12500 12000		417 463 394 451 435 435 457	1	13450	462 369	1	8971 14159	
877499	5 1	1	10860	3.6	392	1953	1	10860	3.6	392						
877660	1	1	11150	3.3	364	1949	1	11150	3.3	364						
878378	3 14	32	9836	3.6	353	1950 1951 1952 1953 1954 1955 1956 1957	1 4 5 3 5 7 4 2 1	5990 9160 9534 8993 8662 10610 11753 8645 12590	3.7 3.7 3.5 3.8 3.5 3.6 3.7	213 338 345 318 328 371 414 321 476		11120 11840			10508 11837	
878520	0 4	8	12 164	3.5	427	1954 1955 1956 1958	2 3 2 1	10520 11673 11715 12020	3.4 3.5	400 399 407 400						

TABLE 15.--DAUGHTER-AVENAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVLHAGE BY SIRE

	DAUGHTER	AVLKAGE	84 21	K E		К	ELUKU AV	EKAGE E	24 21K	FRA	ERESHENING	YLAK				
SIKE NO.	DAUGHTERS	KECOKDS NO.		TEST PCT.		FRESH YEAR	KLCORUS NO.			FAT Lb.	RECORDS		FAT	YEAKLY HI KECORDS MO.		FAT
							HOLS	TEIN								
87866	5 1	1	14450	3.6	525	1955	1	14450	3.0	525						
88017	8 61	154	11584	3.6	410	1951 1952 1953 1954 1955 1956 1957 1956	4 10 44 30 21 17 12 6 4	11448 11806 11719 12039 12002 11409 12033 12995 12298	3.5 3.6 3.6 3.5	417 418 412 426 426 399 428 465 421	2 2 3 3	12550 12627	435 449		F1216 10247 11189 13604 11710	367 401 489
88018	8 1	4	13725	3.9	525	1954 1955 1956 1957	1 1 1	13030 14000 14160 13710	4.0 3.8 3.8	517 525 542 517						
8802 l	0 76	135	12005	5.9	459	1954 1955 1956 1957 1958 1959	24 30 29 16 17 15	10928 11953 11544 12081 13060 13717 11125	3.8 3.9 3.9 3.7	427 457 445 469 511 501 415		12217 12730 13416 12613 13472 12946 11695	465 493 489 477 494 469 433	4 4 5 13 12 4	12205 12598 12539 12736 13416 11854	
88072	3 2	6	11255	4.3	484	1955 1956 1957	3 2 1	9907 11575 14660	4.2 4.5 4.2	418 518 612	1 1 1	11510 15340 14420	461 623 587			
88137	6 1	1	14090	3.1	430	1955	1	14090	3.1	430						
88195	4 3	3	12310	3.6	442	1954 1958	2 1	13030 10870	3.7 3.4	479 370	1	13/00	504	1	14017	513
883 7 2	5 340	799	11387	3.5	395	1952 1953 1954 1955 1956 1957 1958 1959 1960	34 172 199 149 106 72 35 30 2	11139 11378 11335 11920 11750 11739 12209 12912 8400		395 403 398 414 409 401 414 427 273	5 12 13 23 20 23 27 27	10d 14 124 ú 3 126 78 12506 12662 129 39 13 162 11220	383 442 463 444 453 468 470 383	17 22 17 23 25 2	11661 11843 11997 12499 12933 10552	420 431 456 466
88428	5 71	148	12260	3.8	463	1953 1954 1955 1956 1957 1958 1959	31 40 30 18 15 6	12137 11682 12508 11702 12198 13609 13302	3.8 3.8	460 437 471 440 470 528 489	1 2 2 4 3 4 6	12860 11505 12690 14040 13254 13780 12098	463 410 448 512 476 566 451	2 3 5 4 6	13195 12738 13067 14770 12633	459 484 535
88483	8 5	7	13193	3.6	476	1953 1954 1955 1956 1957	1 1 3 1	17226 13490 14130 12000 12470	3.4 3.5 3.6 3.7 3.7	587 466 511 440 458						
88859	3 1	5	14 124	3. 8	528	1953 1954 1955 1956 1957	1 1	11640 14270 16320 15570 12820	3.7 3.7 3.8 3.9 3.7	426 529 614 601 472	}	11250 9570 8540 8650	529 453 426 485	1	9429 8960 9657	456 448 467
88860	2 120	264	12159	3.5	428	1953 1954 1955 1956 1957 1958 1959	26 67 62 47 32 18 11	12367 11810 12099 12224 12768 13736 11355	3.5	435 416 423 427 444 487 400 489	1 3 2 8 13 13 11	13140 14457 12275 13464 12691 13149 12452 13450	475 511 470 477 464 482 453 493	5 8 11 10 7	12755 12583 13079 12905 13085 13374	454 460 478 472 477 477
88868	9 2	4	15728	3.7	581	1957 1958 1959	1 2 1	13840 15210 18650	3.5 3.7 4.0	479 553 737	1 2 1	12140 14450 14660	453 532 567	2	13222	472 555
88918	1 1	1	7370	3.4	253	1960	1	7370	3.4	253	1	11800	370	1	12688	438
88931	2 1582	3036	11089	3.6	399	1952 1953 1954 1955 1956 1957 1958 1959 1960	89 444 570 651 601 351 173 134 23	11109 11214 11146 11427 11065 11590 12245 12363 13127		410 406 402 412 399 413 435 440 453	1 17 29 56 75 103 123 128 21	15280 12426 13315 13285 12718 12614 12551 12721 13021	526 456 481 491 462 454 455 461 467	56 68 99 100 103	12325 12412 12352 12411 13053 13539	447 449 448 452 475
89018	1 88	113	12350	4.0	490	1957 1958 1959 1960	8 39 62 4	11489 12475 12552 12878	4.2 4.0 4.0 4.2	483 495 495 526	3 35 60 4	13223 13199 12965 13370	485 495 480 489	3 28 48 2	13988 13450 13377 14688	511 500 495 519
89046	د5 د	109	13258	3.6	471	1953 1954	6 22	12270 12764	3.5 3.5	430 448	1	10090	354			

227

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

	DAUGHTER	AVERAGE	BY SI	RE		R	ECORD AVE	RAGE I	SIR	E BY	FRESHENING	YEAK				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RLCORDS NO.				305-DAY (RECORDS NO.	CONTEMP MILK Lb.	FAT	YLARLY H. RECORDS NO.		FAT
						1955 1956 1957 1958 1959 1960	HOLS 26 21 16 11 6	TEIN 13509 13194 13248 14304 15500 15516	3.6 3.6 3.5 3.5 3.7 3.4	483 482 466 505 575 524		13112 13845 12727 12914 14472	508 534 473 464 536	4 5 8 9 4	12505 12781 11707 12020 13865 14530	464 457 434 431 517 530
891636	o 1258	2757	11878	3.6	424	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 72 149 365 550 594 433 285 173 115	12083 11443 11701 11697 11826 12099 12286 12795 13456 12669 12084	3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	457 418 416 422 431 445 479 450 427	3 15 43 53 75 94 123 109	11477 12266 12515 13107 13246 128 47 13007 12522 12041	461 471 459 470 479 467 469 452 440	58 71 87 107 95	12161 12517 12690 12546 13025 12759	438 450 460 454 471 467
891350) 1	1	11280	3.4	378	1953	1	11280	3.4	378						
893638	3 1	7	10961	3.5	385	1952 1953 1954 1755 1956 1957	1 1 1 1 1 1	12530 11490 9700 10500 11060 9100 12350	3.8 3.2 3.6 3.7 3.3 3.9 3.2	473 373 348 384 360 359 397						
894060) 1	1	8890	3.9	342	1949	1	8890	3.9	342						
895911	4	4	12308	3.7	457	1957 1958 1959	1 2 1	12570 13085 10490	3.7 3.7 3.8	459 483 403	2	12850 11720	469 435		12208 11641	
895914	2	7	10084	3.5	347	1952 1954 1955 1956 1957	2 1 1 1 2	10615 10250 10160 11840 11335	3.4 3.2 3.6 3.4 3.4	353 329 369 400 381	1 1 1 1 2	11790 9860 13960 15070 13625	410 333 511 550 502			
896853	3 5	7	11294	3.9	439	1953 1954 1956 1957 1958 1959	1 2 1 1 1	13200 10695 11100 13670 9930 10490	3.9 4.0 4.1 3.8 3.8	448 405 444 554 382 390	<u> </u>	13550 14440			13560 13363	
898193	3 1	8	13981	3.6	509	1949 1951 1952 1954 1955 1956	1 2 1 1 1 1 1 1	14910 13555 13430 13500 14220 13780 14900	3.5 3.6 3.8 3.7 3.9 3.8	520 468 485 518 531 540 539						
898470	2	2	11585	3.8	446	1949 1951	1	9120 14050	3.5 4.1	316 576						
900271	5 0	60	12632	3.8	478	1957 1958 1959 1960	7 26 26 1	9970 13653 13000 12700	3.8 3.7 3.0 3.6	377 507 499 462	4 24 25 1	11930 13318 12060 13710	414 494 452 503	22 22 1	12184 13460 12880 14148	475 481
901240	1	1	12290	3.2	394	1952	1	12290	3.2	394						
90 1445	5 1213	2421	11784	3.6	421	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 38 87 89 147 205 252 307 373 355 274 255	11945 11681 11836 11621 12081 11906 11934 11998 11744 11956 12497 12779 12102	3.6 3.6 3.6 3.5 3.6 3.6 3.6 3.6	422 421 427 417 433 426 420 419 425 446 457 432	1 13 23 30 12 124 223 246 29	12490 12358 13078 13049 13373 12886 12788 12756 12756 12600	486 446 472 469 470 463 460 461	35 48 114 183 199 28	12512 12288 12603 12599 12941 13247	454 444 456 454 472 488
90∠500) 2	2	11880	3.7	431	1958	1	12820 10940	3.5	421	1	17350 11020	626 419	1	10878 10355	416 395
90250	305	613	12040	3.6	432	1959	18	12503	3.0	452	3	14573	523		10357	24.2
						1954 1955 1956 1957 1958 1959	130 163 116 89 50 40	11921 11783 11985 12042 12848 13028 11893	3.6 3.6 3.5 3.5	431 426 432 436 454 463 413	14 26 25 37 31 38 7	12798 12137 12959 12223 12677 13184 11744	460 440 465 442 454 476 411	21 24 28 24 33 3	12014 12581 12113 12469 13607	

1953 40 11780 3.8 449 1954 242 11536 3.7 430 1955 445 11453 3.7 428

902915 1332 2225 11500 3.7 427

2 1355 518 16 13118 476 38 12856 471

40 12097 439

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL OREGOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAK	RECOROS NO.		TEST PCT.	FAT L8.	305-0AY (RECORDS NO.	CONTEMP MILK L8.	. AV. FAT LB.	YEARLY HI RECORDS NO.	ERD AVE MILK L8.	FAT
						1956 1957 1958 1959 1960	HOLS 522 396 289 256 35	TEIN 11316 11696 12083 12064 11906	3.7 3.7 3.7 3.7 3.7	422 433 448 443 442	03 146 229 248 33	12770 12499 12687 12610 12584	462 454 461 455 454	75 133 189 195 30	12361 12295 12481 12695 13128	447 448 453 460 480
90353	7 308	476	12649	3.4	431	1954 1955 1956 1957 1958 1959	24 101 90 86 79 88 8	12711 12512 11966 12720 13068 13435 12589	3.5 3.4 3.5 3.4 3.4 3.4	439 431 412 438 439 454 420	2 5 10 32 66 85 8	13275 13694 13854 12936 12638 13039 13783	484 490 492 466 453 469 512	7 11 31 56 71 8	13113 12340 12538 12665 13340 13730	469 445 452 456 481 500
90388	7 2	7	12859	3.6	464	1947 1948 1949 1950 1951	1 1 2 2 1	11750 11080 13230 13320 15430	3.6 3.7 3.7 3.5 3.6	420 404 488 466 563						
90422	0 78	108	12512	3.7	462	1955 1956 1957 1958 1959 1960	13 28 18 20 25 4	12326 12343 11886 13089 13471 13885	3.8 3.7 3.9 3.7 3.6 3.6	404 458 461 481 487 488	1 8 16 24 4	13740 13825 12476 13252 13071 13450	556 498 472 486 478 488	1 5 8 13 19 2	12350 12672 12652 12554 13610 14214	488 469 482 462 500 523
90458	1 2	2	11365	3.9	440	1953 1958	1	8590 14140	4 • 1 3 • 7	355 524	1	8050	392			
90489	1 758	1471	11551	3.6	410	1953 1954 1955 1956 1957 1958 1959	5) 272 383 301 191 129 123 13	11293 11017 11600 11614 12096 12331 12945 12772	3.6 3.6 3.6 3.5 3.5 3.5	407 392 412 413 427 434 458 436	4 22 40 55 77 105 120	12740 13220 13315 12768 12769 12915 12619 13038	454 477 481 464 461 469 458 472	37 50 68 89 92	12006 12334 12627 12556 12834 13576	437 450 463 456 463 494
90568	3 1488	2081	12483	3.7	465	1954 1955 1956 1957 1958 1959 1960	24 209 284 266 441 724 133	11953 12179 11986 12351 12836 12759 12575	3.8 3.7 3.7 3.7 3.7 3.7	447 459 448 460 478 476 466	1 25 55 120 308 702 112	12540 12897 12965 12838 12820 12788 12777	508 477 468 464 467 466 466	27 47 109 330 579 113	12490 12678 12378 12628 13108 13409	455 456 450 458 477 484
90578	8 1	1	6440	3.7	238	1959	1	6440	3.7	238						
90600	0 60	81	12295	3.8	465	1955 1956 1957 1958 1959 1960	3 2 15 25 32 4	11917 12885 11522 12631 12354 14565	3.9 4.1 3.7 3.8 3.8 3.8	458 508 429 480 469 542	1 7 23 32 4	12580 13557 13085 12918 12628	508 490 481 473 467	7 21 27 3	8698 13841 12848 12856 13174	413 495 473 470 505
90922		1	11600		415	1956	1	1 1600	3.6	415						
90922	9 42	61	12893	3.9	493	1954 1955 1956 1957 1958 1959	1 3 7 10 18 22	10776 13963 12701 13542 13767 12761	3.5 3.8 3.9 4.0 3.9 3.8	377 529 499 542 536 490	1 3 6 18 22	15310 15317 15322 14823 13731	626 632 627 561 519	3 6 17 15	14661 14194 14469 14050	572 546 568 538
90943	4 1	2	11705	3.9	457	1955 1956	1	11300 12110	3.8 4.0	434 479						
91002	9 2	2	8130	3.5	285	1956 1958	1	8480 7780	3.6 3.4							
91004	6 2	9	11580	4.3	485	1949 1950 1951 1952 1953 1954 1956	1 1 2 1 1 1	12990 9400 11050 14150 15210 15840 13120 14750	4.2	543 395 459 582 637 681 538 599						
91077	4 13	22	12633	3.8	474	1952 1953 1954 1955 1956 1957 1958 1959 1960	2 4 4 2 1 2 3 2 2	12455 15808 15083 16465 19260 10885 10997 11765 9845	3.7 3.5 3.0 4.0 3.8		1 3 2 2	12610 12583 13795 11400	458 473 519 427	2 1 1	12808 14639 13669	490 562 529
91148	8 4	11	11544	3.6	408	1952 1953 1954 1955 1957	3 4 2 1	9705 6560	3.8 3.6 3.4 3.7 3.6	349 423 326 241 343	1	4430 88 7 0	162 309	1	8448	298

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

229

DAUGHTER AVERAGE BY SIRE

	DAUGHIEK	AVERAGE	D1 31	R.L		K	LCORU AVI	LKAGE E	3 T 2 T K	EBY	I KE 2HENING	YEAR				
SIRE NO.	DAUGHTERS NO.	KECURDS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.	MILK	TEST PCT.	FAT LB.	RECORDS	MILK	FAT LB.	YEARLY HE RECORDS 110.	MILK	RAGE FAT Lu.
							HOLS	TEIN								
913292	2 1	1	16370	3.3	5.38	1959	1	16370	5.3	538	1	14890	563			
91338	1 1	4	12178	4.0	479	1954 1955 1956 1957		11930 11810 13830 11140		472 456 543 444						
913988	8 3	6	12347	4.4	544	1955 1956 1957 1959	2 1 2 1	9190 12420 13605 16070	3.8 4.1 4.6 4.6	349 567 623 733		14340 15100	596 505	1	14846	567
915811	2	3	10933	4.1	445	1955 1956 1958	 	10310 11080 11170	4.2 4.2 3.9	438 406 438	1	13110	490	1	13680	519
915999	9 9	20	12322	4.0	495	1953 1954 1955 1956 1957 1958 1959	2 5 4 3 5 1 2	10980 12152 13000 12293 11643 13090 13255	4.2 4.0 4.0 5.8 5.9 5.9	460 492 536 484 462 514 534	 1 1 1 2	12280 13090 14520 10360 13170 13935	508 372	1 1 1 1 2	11096 13145 12753 11936 14737	470 458 440
919608	8 20	29	12400	5.6	439	1955 1956 1957 1958 1959 1960	1 7 5 6 7 3	9060 11866 12864 13505 14013 14313	3.8 3.5 3.5 3.6 3.5	343 419 444 481 489 515	5 7	11750 13604 12879 14503	421 476 464 506	2 2 5 3	13598 14438 13919 14624	499 498
920562	2 1	1	11420	3.8	433	1958	1	11420	3.8	433						
92087	1 1	3	12973	4.0	510	1957 1958 1959	1 1 1	11870 11840 15210	4.2 4.0 3.7	499 468 564		13500 13000		1 1	12284 13200	496
922287	7 31	83	13331	3. 5	470	1949 1950 1951 1952 1953 1954 1955 1956	4 6 13 19 11 12 11 5	13163 14045 13673 13615 11622 13359 13235 13132 11390	3.8 3.5 3.5 3.4 3.5 3.5 3.5 3.5	493 525 483 477 398 467 471 466 379		12180 13440	426 510	1 1 1	12437 12993 13865	455
922288	8 6	7	1 1858	3.6	423	1958 1959 1960	2 4 1	11820 11938 11800	3.5 3.6 3.5	418 432 411	2 4 1	15050 12158 12250	554 456 447	1 2 1	10955 13200 10955	492
922499	9 1	1	10330	3.3	339	1953	1	10330	د . د	339						
ا1 3د 92	4 6	10	13624	3.7	496	1954 1955 1957 1958 1959 1960	1 1 2 4	8210 14260 14580 13130 14468 13660	3.9 3.7 3.8 4.1 3.4 3.6	318 321 357 535 491 491	2	14860 12115 12350	487	1 2 3 1	14737 12884 13356 13124	564 487
9233 11	В 6	12	12142	3.7	ተ #¤	1954 1955 1956 1957 1958	2 5 1 2 2	13775 13518 12570 17190 13355								
92374	9 2	13	8757	3.9	343	1952 1953 1954 1955 1956 1957 1958	1 2 2 2 2 2	9190	4.0						9603	741
						1959	1	9370	4.0	373					10126	377
92375			13290			1949	1	13290	3.3	444						
92456	4 1449	2777	12317	3.6	f† f† f†	1948 1949 1950 1951 1952 1953 1954 1955 1956	14 43 36 29 47 197 373 472 533 445	12479 12112 12590 12890 12448 12193 12031 12664 12213 12602	3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6	456 464 451 439 434 450	22 46 84 159	13241 12300 12827 12619 12680	455 477 452 456	ช3 139	12177 12068 12152	432 442
						1953 1954 1955 1956	373 472 533	12031 12664 12213	3.6 3.6 3.6 3.6 3.6	434 440 440 450 473 478	22 46 84 159 246 254	12300 12827 12619	455 477 456 456 468 400	63 139 208 207	1206	8 2 7 8

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	NO.	L8.	TEST PCT.		305-0AY RECURDS		FAT	YEAKLY HI KECOKUS NO.		FAT
							H0F?	TEIN								
925390	6 1	5	13158	3.6	468	1952 1953 1955 1956 1957	 	11020 12410 13180 15830 13350	3.4 3.5 3.6 3.7 3.6	378 430 469 589 474						
926100	0 32	81	10629	3.7	38₹	1948 1947 1950 1951 1952 1953 1954 1955 1956 1957	1 11 11 17 15 10 6 4 4 2	7240 10930 10469 11097 10756 10742 12527 11733 11573 12840	3.9 3.7 3.8 3.7 3.7 3.7 3.6 3.7 3.8 3.8	283 400 390 410 391 398 457 435 434 487	1	11620	402			
92610	2 115	303	10995	3.6	392	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 15 38 38 29 39 46 37 23 22 6	12080 10821 10887 10709 11775 11416 11450 11711 11130 12128 12042 11312 10120	4.0 3.5 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	469 375 389 381 420 410 409 419 394 433 432 397 306	1 4 3 4 6 5 9 8 6 6	11750 12345 11073 11540 12120 12260 11147 12031 11988 12403 11520	413 428 402 417 407 414 384 412 431 448 387	5 9 9 5 5 1	12058 11994 11543 12182 12574 12426	4 / 7 4 / 1 400 4 4 7 4 0 8 4 2 4
92636	3 53	87	12301	3.7	452	1954 1955 1956 1957 1958 1959	11 24 15 12 12 11 2	11096 12393 11815 13563 12419 13786 15605	3.7 3.6 3.7 3.7 3.6 3.8 4.0	409 448 436 498 451 520 626	1 3 4 5 11 11 2	12270 14107 13628 14266 13136 13629 14580	433 493 501 530 480 500 541	4 3 6 9 11 2	12909 12986 13474 13162 13798 14241	466 468 487 463 505 532
92894	9 1	2	10850	3.7	400	1958 1959	1	10850 10850	3.6 3.8	387 412	1 1	13830 13610	500 509	1	13810 13363	447 495
92916	1 2	3	12433	4.1	499	1956 1957	2	12340 12020	4.D 4.0	492 478						
92944	5 1	1	15590	3.6	565	1953	1	15590	3.6	505						
92996	2 2135	3500	12882	3.6	465	1951 1952 1953 1954 1955 1956 1957 1958 1959	10 63 181 265 350 368 546 792 812 113	12024 12274 12346 12342 12698 12781 12691 13196 13457 12860	3.5 3.7 3.7 3.6 3.6 3.6 3.6 3.6	418 447 450 445 462 463 459 478 485 459	6 25 55 94 261 706 793 105	13203 13227 13254 12850 12675 12002 12680 12544	482 482 485 467 458 466 469 454	60 92 236 596 643 97	12206 12400 12407 12695 13142 13254	440 447 434 400 478 482
93126	7 I	1	11810	3.6	426	1958	1	11810	3.6	426	1	11000	395	1	11260	397
93393	0 в	9	11914	4.0	468	1953 1955 1957 1958 1959 1960	1 1 3 1 2	6470 9000 13227 11640 11040 14180	4.4 3.9 3.9 4.1 3.9 3.9	284 353 513 477 426 556	2	11940 12730 13320	491 476 504	1	12339	460
9340∠	1 1	4	16160	3.5	561	1955 1956 1957	1 1 2	14780 18010 15925	3.5 3.6 3.4	519 654 548	1 1 2	13490 14020 13450	496 520 496			
93671	6 920	2151	11059	3.5	38/	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	79 223 335 425 407 273 188 122 57 23 18	11899 11313 11093 11447 11192 11414 12081 11928 12462 13042 13406 13170	3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	420 395 398 389 387 416 415 440 438 473 436	1 1 4 6 0 10 12 17 12 16	13170 12860 11628 12533 11675 12563 11708 12772 12352 12378 13500	520 526 437 453 428 451 432 463 446 463 509	10 11 19 12 10		420 419 435 448 471 459
93772	0 1	1	10000	3.8	379	1952	1	10000	3.8	319						
93803	4 540	736	11955	3.6	431	1955 1956 1957 1958 1959 1960	37 100 129 206 239 25	11684 11146 11373 12175 12674 12011	3.1 3.6 3.6	421 406 408 438 455 430	3 13 54 188 232 23	11853 12743 12510 12871 12960 12778	412 457 444 467 471 464	3 15 47 159 189 21	12375 12207 12162 12592 13109 12909	436 437 442 457 475 470
93808	2 359	557	11256	3.8	431	1950	ಕ	11069	3.7	399						

LEW YORK							23	ı								
TABLE 15.							RTIFICIAL STATE ONL		21NG 0	RSANI	ZATTONSGH	00PE0	8Y BK	LED,		
	OAUGHTEK	AVERAGE	84 21	RE		R	ECORO AVI	ERAGE E	Y SIR	E 8Y	FRESHENING	YEAK				
SIRE NO.	DAUGHTEKS NO.	RECOROS		TEST PCT.	FAI L8.	FKESH YEAR	RECORUS NO.		TEST PCT.	FAT	305-04Y C RECORDS NO.			YEARLY HE RECOROS NO.		
						1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	HOLS' 20 22 30 26 18 60 105 125 120 23	TEIN 11290 10669 10590 10916 10831 10810 11094 11589 12157	3.9 3.8 3.9 3.9 4.0 3.9 3.9 3.8 3.8	436 402 416 428 427 423 427 439 460 449		11570 12280 9840 11900 12184 12091 12184 12579 12459	424 443 421 460 425 439 442 456	1 5 47 86 94 15	11848 11508 11856 12114 12610 12964	438 417 439 438 456 473
939765	1	1	13300	3.7	492	1959	1	13380	3.7	492	1	10880	385	1	109≯8	398
9 և Ս և 2 կ	138	249	12910	3.4	439	1954 1955 1956 1957 1958 1959 1960	36 63 52 39 35 21	12808 12766 13053 13136 13192 13095 14180	5.4 5.4 5.4 5.4 5.4 5.3	442 436 441 447 451 436 488		12873 12053 13294 12265 12778 12184 12443	462 473 490 443 461 442 467	7 8 10 22 12 3	12091 12741 12059 12365 12081 12847	447 478 439 446 441 471
941567	1	2	15215	4.0	600	1958 1960	1	15570 14860	4.0 3.9	620 580	1	15250 13990	584 540	1 1	14334 15151	534 571
941780	2109	4363	11662	3.6	417	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	14 110 242 315 359 405 501 639 717 474 303 220	12247 12507 12000 11880 11834 11729 11574 11930 11730 11877 12147 12028 11599	3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	439 428 431 427 423 414 429 421 428 429 407	1 1 1 2 12 21 39 90 123 233 211	10090 11150 12410 11320 12608 12979 12898 12551 12512 12665 12443 11407	363 377 421 399 470 476 465 465 457 454 456 452	42 85 115 198 166 26	11917 12032 12238 12360 12843 12637	4°9 435 443 448 465 471
943293	14	14	13013	3.6	464	1956 1957 1959	i 2 1	12780 13090 13090	4.1 3.3 3.7	329 423 480	1	13670 15150	494 573	1 1	13363 14137	455 535
943749	22	30	12924	3.8	488	1956 1957 1958 1959 1960	1 1 7 19 2	14930 15480 12786 13010 12845	3.7 3.4 3.7 3.8 3.7	546 533 470 491 460	7 19 2	13036 12969 13280	478 475 472	6 14 2	12762 13063 12132	462 475 450
944606	. 8	16	14042	3.5	490	1954 1955 1956 1957 1958 1959	1 2 2 4 5	13000 14370 14620 14665 14038 13625	3.4 3.4 3.3 3.6 3.3	397 479 484 482 506 447	 	14100 12530 13168 12640	520 443 486 466	1 1 4 2	12731 13080 12472 13336	439 471 443 492
946250	2	2	12955	3.4	440	1957 1959	1 1	15010 10900	3.3	522 3 57	1	10180	393	1	9396	349
946851	6	20	12888	3.5	432	1950 1951 1952 1953 1954 1955	4 4 3 3 2	11820 14250 11783 13033 14300 14570	3.6	456 510 416 409 446 487						
946961	1	1	14010	3.5	485	1955	1	14010	3.5	485				1	11630	461
947319	1	1	9830	3.8	372	1952	1	9830	3.8	372						
949094	31	66	15340	3.6	558	1953 1954 1955 1956 1957 1958	6 13 15 12 10 10	15095 16631 15175 15143 13851 16232	3.7 3.7 3.5	555 606 558 529 502 602	2 3 2 2 2 3 6	17320 15820 11960 14735 12870 15863	683 592 503 543 502 596	2 1 3 6	13238 9592 12931 14833	411 498
949139	2	2	10960	3.9	425	1959 1960	1	12380 9540	3.6 4.2	446 403	1	12550	472			
949159	62	73	12112	3.5	415	1957 1958 1959 1960	8 22 41 2	11501 11872 12503 10645	3.4	392 411 425 387	5 20 40 1	13114 12367 12719 9510	480 452 408 358	17 26 2	12930 12117 12518 11156	443 443 453 410

57

24

5 4 3 4 10753 11413 12418

1326₺

13673

13324 14960

5.6 3.7 3.6

3.6 3.5 3.4

3.9

4.0 3.7 3.8 3.9

1952

1954

272 13462 3.6 484

24 10404 3.9 399

19 12878

13879

467

501

474

546

13

24

13741 13634

13124 13648

1 12800 441

14570

TABLE 15.--OAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

232

OAUGHTER AVERAGE 8Y SIRE

												CONTEN		WE 401 W		0.4.1.1
SIRE NO.	OAUGHTERS NO.	RECUROS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	RECUROS NO.	MILK		YEARLY HE RECOROS NO.		FAT
						1955 1956 1957	HOLS1 2 2 1	10525 12960 12020	3.7 4.0 4.1	390 515 495	1	14280 14540	508 541	1	12273 12273	440 432
951928	3 1	2	15345	3.8	589	1952 1954	1	16230 14460	3.8 3.8	625 552						
952029	39	և կ	13118	3.6	467	1956 1958 1959 1960	1 8 31 4	14050 13833 12856 12705	3.6 3.5 3.6 3.5	499 481 462 432	8 29 2	13444 12243 12955	479 453 443	6 26 4	12951 13273 12764	473 487 453
95242	1 1091	1598	11570	3.7	431	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 17 26 39 37 58 103 255 372 365 273	12498 11923 11020 11944 12124 11351 11827 11125 11348 11824 12293 12618	3.6 3.6 3.7 3.7 3.7 3.7 3.7 3.7 3.7	453 433 595 441 456 415 439 415 424 440 458 466	1 2 4 8 38 140 513 266 42	14210 12375 10355 12204 12072 12308 12588 12695 12002	603 508 388 440 440 447 456 462 440	8 37 125 249 216 37	11940 12113 12032 12386 12906 13101	424 433 440 449 469 480
95446	63	84	11754	3.7	433	1955 1956 1957 1958 1959	7 19 16 20 20	12611 10835 10786 12826 12764 12285	3.6 3.7 3.6 3.7 3.7 3.7	450 406 394 478 471 456	2 5 16 20	12935 13476 13168 13719 12850	468 482 480 504 474	1 5 15 15 2	11456 12178 13158 13762 13244	425 445 476 507 481
95464	5 40	58	11389	3.8	426	1955 1956 1957 1958 1959	4 11 15 14 11 3	9920 10259 11417 11139 11575 13510	3.8 3.7 3.8 3.8 3.8	369 373 420 424 444 532	2 5 13 10 3	10270 10982 12554 12572 13773	365 390 461 456 501	1 2 4 8 9 3	1 1925 10895 11083 12199 12042 14886	422 388 399 436 439 552
95546	7 I	1	8530	3.6	306	1959	1	8530	3.6	306	1	11090	400	1	10856	393
95549	3 234	309	12507	3.7	461	1955 1956 1957 1958 1959 1960	6 19 51 89 126 18	11470 12814 12609 12456 12654 12986	3.7 3.6 3.7 3.7 3.7	421 463 459 455 471 480	1 11 25 79 117 16	12960 12265 13188 13386 13005 14643	4442 480 486 475 523	2 12 24 69 101 16	11745 12556 12645 13120 13227 14530	414 443 460 474 479 524
9556 I	9 1025	1766	127/0	3.7	469	1954 1955 1956 1957 1958 1959	104 320 432 366 278 234 32	12123 12525 12572 12898 13526 13670 13717	3.7 3.7 3.7 3.7 3.7 3.7 3.8	444 463 463 473 493 502 517	14 53 112 154 226 227 32	12969 13091 12757 12894 13054 13109 12855	479 472 471 469 473 478 483	49 97 138 199 188 30	12322 12814 12651 12863 13343 13551	446 465 462 467 486 503
95608	1 2253	3319	13098	3.6	475	1954 1955 1956 1957 1958 1959	68 368 473 406 654 1169 181	12460 12837 12748 13207 13491 13417	3.6 3.6 3.6 3.6 3.6 3.6	451 460 462 477 490 488 479	14 68 122 183 580 1134	13774 13448 12970 12679 12976 12920 12679	491 490 475 468 473 472 460	64 111 165 503 930 160	12722 12528 12542 12806 13161 13491	457 450 457 465 479 490
95912	1 2	3	13373	4.3	568	1958 1959	2 1	13360 12520	4.3 4.1	570 507	2 1	14550 14980	531 579	2	13222 14977	442 555
96149	3 2	2	13245	3.9	516	1959	2	13245	3.9	516	2	13675	476	2	12525	426
96342	2 169	1188	12904	3.6	461	1954 1955 1956 1957 1958 1959	11 157 176 175 316 301 52	12159 12719 12254 12523 13554 12915 13354	3.6 3.0 3.5 3.5 3.6 3.5	438 452 435 444 485 465 467	15 27 70 210 293 41	13163 12187 12110 12885 12879 12507	479 448 441 469 469 458	12 25 62 224 234 43	12114 11979 12099 12740 13122 13332	445 427 448 462 477 488
96394	7 270	371	12161	3.7	445	1956 1957 1958 1959 1960	57 121 95 82 16	11585 11852 12411 13397 12039	3.7 3.7 3.6 3.6 3.6	427 437 452 485 435	14 53 83 82 15	12274 12421 12672 13146 12315	447 447 459 483 444	15 48 66 65 16	12542 12187 12479 13469 12692	457 439 451 491 463
95439	5 2	ц	12947	3.6	463	1955 1954 1955 1958	1 1 1	17130 12890 8030 13210	3.3 3.3 3.4 3.8	559 424 274 506						
96459	9 478	773	12285	3.5	422	1950 1951	14 23	12204 11916		426 411						

3.6

3.5

3.6

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BRLED,

NEW YURK 234

TABLE 15.--DAUGHTÉR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--KECOROS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE.	DAUGHTERS NO.	KECOROS NO.			FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCI.	FAT LB.	305-DAY (RECORDS NO.	MILK		YEARLY HI RECORDS NO.		FAT
						1953 1954 1955 1956 1957	HOLS: 11 6 5 3	9531	3.1 3.5 3.4 3.4 3.3	348 345 376 304 383						
97477	4 475	630	12240	3.7	446	1955 1956 1957 1958 1959 1960	8 24 84 204 277 33	11946 11271 11660 12429 12574 12370	3.4 3.7 3.7 3.6 3.7 3.7	408 417 427 449 458 452	1 5 46 185 268 32	14780 11910 12155 12546 12704 11977	538 432 435 455 463 436	1 5 41 153 215 28	13102 11306 11635 12680 12985 13066	473 405 423 459 471 475
975137	7 132	188	12816	3.7	468	1955 1956 1957 1958 1959 1960	10 28 44 50 43 3	10887 12719 12927 13099 13135 14349	3.7 3.7 3.7 3.7 5.6 5.7	402 469 473 477 472 529	1 2 16 42 47 7	15360 13225 14255 13546 13039 13683	588 490 522 492 478 484	1 1 14 39 36 8	13930 13974 13223 13242 13213 14628	502 520 484 482 486 537
975138	В 20	22	13831	3.6	492	1957 1958 1959	10 6	13830 13558 13825	3.6 3.7 3.4	496 500 471	2 10 6	13550 13013 12368	478 486 447	2 10 8	12764 11746 12097	460 442 443
97568	3 76	113	11897	3.7	43/	1955 1956 1957 1958 1959 1960	1 3 11 40 51 7	10050 7603 11789 11979 12300 12421	3.6 3.9 3.6 3.7 3.7	386 295 445 442 450 450	7 38 46 6	12287 12955 12735 13798	435 468 467 500	4 36 34 7	14268 12754 12874 14024	518 459 465 506
975892	2 1	2	11145	3.7	410	1958	2	11145	3.7	410	1	14040	517	1	12960	483
97589	3 2	3	12303	3.7	449	1958 1959	1 2	13730 11600	3.3 3.7	450 426	1 2	12100 11710	449 446	2	13653	470
97671	0 1	1	20530	3.4	706	1959	1	20530	3.4	706	1	16330	580	1	15391	556
97680	1 9	15	11127	3.7	418	1954 1955 1956 1957	6 4 3 2	10375 13446 10567 15100	3.6 3.6 3.6 3.6	389 312 396 534						
97/116	0 19	35	12120	3.9	470	1954 1955 1956 1957 1958 1959	1 6 8 4 9 6	13600 11515 11196 13755 11932 13843 10580	3.8 3.9 3.6 3.7 3.9 4.0	522 455 421 515 468 534 422	1 2 2 2 4 6	15730 14155 13035 14050 13013 13637 10660	640 519 477 522 456 504 385	2 2 2 4 4	12323 12688 13413 12162 13988 11260	459 472 504 432 503 403
97875	0 137	179	11786	3.7	434	1953 1954 1955 1956 1957 1958 1959 1960	1 1 5 18 36 65 48 3	13080 15660 10636 11485 11338 11679 12566 13337	3.7 3.7 3.6 3.7 3.7 3.7	482 574 356 427 412 433 460 488	7 17 54 45	12764 12220 13062 12500 13590	473 451 482 459 507	7 15 47 34 3	12857 12710 12842 12908 13745	464 461 473 471 513
97875	1 2	4	12498	4.2	518	1958 1959	2	12945 12050	4.2	536 499	2 2	12720 12870	468 464	2 2	12258 12775	445 470
97908	7 1	1	17750	3.5	617	1958	1	17750	3.5	617	1	15290	559	1	17287	629
98130	8 46	51	11951	3.6	434	1958 1959 1960	10 34 7	13225 11800 12063	3.6 3.7 3.7	472 430 440	10 33 7	13073 13205 13671	479 484 487	29 7	13460 13358 13556	492 487 495
98229	2 1	1	6410	3.7	239	1955	1	6410	3.7	239						
98479	9 251	295	12684	3.7	469	1957 1958 1959 1960	14 84 169 28	12681 13289 12751 12118		480 49 1 473 436	8 72 166 27	13339 13426 13083 12271	497 496 480 456	7 68 136 23	12726 13461 13323 13222	477 495 488 487
98708	0 14	29	11829	3.6	417	1951 1952 1953 1954 1955 1956	3 5 3 4 4	12330 10996 10422 13473 12515 12945 10990	3.7 3.5 3.6 3.5	441 390 376 438 451 450 439				i	10006	366
98708	1 21	60	13092	3.4	ե ե ե	1951 1952 1953 1954 1955 1956 1957	3 12 11 12 8 6 7	12297 12798 13602 12574 13509 13207 14059 12270	3.7 3.5 3.4 3.5 3.3 3.3 3.2 3.2	450 447 463 434 449 439 450 396	1 2 2 1 2	15120 14940 17335 14700 16340	515 520 605 495 602	2 1 1	13625 13821 13778	481 498 496

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANILATIONS--GROUPLO BY BRLLD.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y S I	RL		R	ECURO AVI	ERAGE B	Y SIK	E 8Y	FRESHENING	YEAK				
SIRE NO.	OAUGHTERS NO.	RELOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.	MILK L8.		FAT LB.	305-DAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		EAT
							HOLS	TEIN								
987428		1	7610	4.3	325	1954	1	7610	4.3	325						
989939	ц	5	12310	4.1	506	1958 1959	1 4	17840 12120	4.2	743 501	1 3	13220 13707	534 504	1	12873 12 77 8	500 492
993764	89	126	12646	3.6	449	1956 1957 1958 1959 1960	18 49 50 2	12 18 1 12257 12345 13267 15105	3.5 3.6 3.5 3.5 3.5	425 433 444 471 517	3 8 40 47	13513 12654 13453 12997 13280	512 474 497 478 499	3 6 36 39 1	13334 12292 13365 13467 8905	523 462 491 493 439
995619	317	469	12101	3.5	427	1954 1955 1956 1957 1958 1959	18 60 65 87 125 100	11712 11862 11381 11792 12747 12638 12998	3.6 3.6 3.5 3.5 3.5 3.5	421 423 402 409 450 444 461	1 7 15 50 110 98 13	12760 13139 13113 12912 12549 12703 12728	479 492 463 472 457 465 462	5 15 42 84 73 10	12443 12701 12657 12554 12784 12970	445 450 459 455 462 473
996252	14	5	12043	4.0	481	1955 1956 1957 1959	1 2 1 1	11510 13205 9260 13180	3.8 3.9 3.7 4.3	432 509 339 572	1	10050 9050	412 436	1	11353 9091	459 408
997478	1	1	9230	3.2	294	1960	1	9230	3.2	294	1	9800	355	1	11162	404
997481	49	62	12164	3.6	439	1955 1956 1957 1958 1959 1960	1 3 11 16 28 3	11380 12403 11786 13195 12605 10673	3.7 3.6 3.6 3.6 3.6 3.4	425 439 429 466 457 364	1 8 14 28 3	12290 12153 12805 12604 14703	427 429 459 453 535	1 6 13 23 2	12404 13178 12956 12586 13298	432 472 466 455 409
998194	1	1	8970	4 - 4	393	1952	1	8970	4.4	393						
999938	16	28	11969	3.6	432	1952 1953 1954 1955 1956 1957 1958 1959	1 3 4 7 5 3 1	10990 12463 11025 11613 11166 12463 14320 12843	3.9 3.8 3.6 3.5 3.6 3.8 3.8	432 479 394 402 399 468 543 470	L _k	12830	488	1	14661	564
1000390	109	133	13420	3.8	507	1958	31	14546	3.8	549	30	14000	516	26	13714	506
						1959 1960	88 14	13312 12606	3.8	505 467	88 13	13168 12359	489 453	75 11	13154	502 483
1001512	47	60	11014	3.9	426	1957 1958 1959 1960	7 27 24 2	11721 11250 11122 10090	3.8 3.8 3.9 3.4	450 434 433 346	23 23 2	13870 13580 13068 14040	494 499 482 519	3 21 22 2	13956 13167 13063 13413	492 484 454 483
1002177	6	13	12394	3.9	487	1953 1954 1955 1956 1957 1958 1959	1 1 1 1 1 5 3	9600 11500 13040 12790 12310 12868 12703	3.9 3.9 3.9 4.0 3.7 3.9 4.1	375 451 508 509 459 511 520	1 1 1 1 1 4 5	118y0 13010 14030 145b0 12y90 12/43 13043	426 444 461 515 434 458 474	1 1 1 2 3	12437 12731 13080 13560 13556	441 439 471 485 496
1003598	57	83	12722	3.7	463	1955 1956 1957 1958 1959 1960	8 5 12 24 32 2	12950 12280 13025 13264 12829 11605	3.6 3.6 3.6 3.6 4.0	466 448 466 475 471 458	2 4 20 32 2	13690 11840 13363 13600 13071 14525	501 417 469 500 475 540	1 2 5 19 25 1	14933 13129 13669 13310 13557 15631	537 446 484 489 500 611
1004232	103	134	12942	3.7	483	1956 1957 1958 1959 1960	8 23 44 43 16	13579 13875 12916 12777 11808	3.7 3.7 3.8 3.8 3.8	501 510 484 483 441	1 10 38 43 15	14980 13555 12817 13051 12709	569 504 474 480 477	1 12 35 34 14	13974 13644 12618 12732 12756	5/0 499 464 466 475
10055 75	53	73	13255	3.7	483	1956 1957 1958 1959 1960	1 8 33 28 3	16220 13396 13025 13375 13620	3.1 3.8 3.6 3.6 3.6	606 508 473 483 486	6 31 28 3	14138 13467 13219 13807	539 496 494 506	5 25 20 3	13701 13032 13306 13821	510 480 495 512
1006864	371	573	12092	3.8	455	1951 1952 1953 1954 1955 1956 1957 1958 1959	14 31 35 33 23 35 70 128 167 37	12316 11929 11203 12148 12241 11794 11801 12493 12503 11985	3.7 3.6 3.7 3.6 3.6 3.8 3.8 3.8	450 449 411 448 445 438 445 471 473 453	1 1 2 2 5 32 114 165 34	12730 14520 14120 10960 11625 12020 12449 12573 12618 11962	483 577 581 401 425 434 456 455 459 428	2 2 27 95 124 31	11227 11129 11836 12326 12731 12939	406 396 439 443 461 471
1006866	17	18	12220	3.8	465	1958 1959	4 14	12588 11940	3.5	444 461	3 14	13023 13971	488 515	3 9	12633 13385	460 504
1007194	842	1129	11799	3.8	443	1956 1957 1958	26 119 382	11022 11374 11912	3.7 3.8	409 423 447	64 35 I	12697 12621 12839	458 457 467	o 57 301	12235 12317 12697	436 454 462

NLW YORK 236

TABLE 15.--OAUCHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	KECUKOS NO.			FAT L8.	FRESH YEAR	KECURUS NO.			FAT	305-DAY RECORDS NO.			HECOKO? ATWKTA HI		FAI
						1959 1960	HOLS 529 73	TEIN 12073 11437		454 420	522 64	12740 12309	464	413 63	13028 12979	474
1007680	139	190	12868	3.7	479	1956 1957 1958 1959 1960	3 19 62 86 10	13058 13304 12875 12820 11535	3.9 3.7 3.1 3.7 3.7	510 486 482 477 419	3 12 49 85 17	13243 13587 14145 13527 11576	470 507 519 498 421	3 4 35 63 18	11598 15740 13907 13825 13020	417 586 522 512 472
1008622	2 88	125	12150	3.8	463	1955 1956 1957 1958 1959 1960	3 20 22 39 36 5	12720 11576 12230 12682 12857 9682	3.8	492 432 461 479 491 354	4 7 34 36 5	12035 11670 13430 13030 12374	431 431 431 436 486	4 7 31 33 3	12704 12161 13198 13516 13810	462 444 454 500 517
1008924	÷ 1	1	9750	4.2	405	1956	1	9750	4.2	405						
1009092	2 1	1	6170	3.6	224	1959	1	6170	3.6	224	1	147.0	570	1	15020	562
101026	5 .55	150	10715	3.7	391	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	20 31 35 24 14 11 8 5	10618 10439 10541 11090 11460 11045 10635 11894 15680 9030	3.7 3.7 3.6 3.7 3.5 3.5 3.3	401 386 386 409 412 411 376 386 577 260	1 1 1 1 3 1	10220 10320 11510 7750 11500 12987 14250 13060	399 361 443 279 449 480 519	3 2 3 2 1	10431 11538 11540 12661 14977 14192	377 473 417 452 539 474
1010666	D I	1	14680	3.6	526	1956	1	14680	3.6	526						
101257	4 2	3	13435	3.3	438	1957 1958	1 2	1469U 12960	3.0 3.3	436 425	2	11685	439	1 2	11162 13042	373 468
101259	3 90	110	12657	3.6	452	1957 1958 1959 1960	1 27 68 14	17000 13568 12464 13346	3.5 3.6	687 480 449 462	27 65 11	13607 12904 13877	504 475 490	25 58 14	13600 12940 13686	499 475 493
1013036	5 179	217	12449	3.7	457	1958 1959 1960	43 150 24	12420 12511 12356	3.7 3.1 3.1	461 463	41 146 21	12005 12643 13228	478 467 477	34 119 20	12843 13007 13251	479 47∠ 466
1013419	5 2	2	16400	3.9	6 34	1959	2	16400	3.9	634	2	15800	571	2	16209	607
101376	0 319	435	11590	3.6	412	1956 1957 1958 1959 1960	36 112 145 115 24	11402 11162 12004 12137 11448	3.5 3.6 3.5	413 395 428 430 395	6 52 133 113 24	13490 12552 12634 12508 12323	489 458 459 455 447	6 41 109 82 19	11932 12438 12687 12725 13118	435 459 458 463 469
101449	0 1	2	11730	3.9	452	1958 1959	1	13300 10160	3.8	511 393	1	14100 12150	500 420	1	13636	486
101460	8 1	1	10060	4.1	40s	1959	1	10060	4.1	408	1	11050	390	1	10998	398
101524	8 1	1	11970	3.5	414	1958	1	11970	3.5	414	1	8000	394			
101685	2 1	1	12 150	5.6	439	1953	1	12150	3.0	439						
101685	3 1	2	12710	3.2	410	1954 1955	1	13020 12400		433 380						
101779	7 2					1959	1	14320	3.0	434	1	12930	470	1	13560	4116
102027	7 126	168	12640	3.8	474	1955 1956 1957 1958 1959 1960	20 52 56	10490 11878 12819 13108 12752 14890	3.7 3.8 3.7	479 493	9 47	13123 13051 13205 13279 12777	486 485 483	9 41 39	11932 12816 13013 13594 14217	467 473 502
102047	3 10	14	11981	3.9	475	1958 1959 1960	10	10477 12470 10600	3.9	493	10	13090 12853 12520	472		14079 13166 13091	471
102101	0 1	2	9845	3.7	354	1957 1958	1	8720 10970	3.6			108ა0 11040		1	9843 11510	
102157	1 3	3	11160	3.5	392	1959 1960	2 1	12000 9480		441 294	2	11/90	482	2 1	1 1947 13233	
102209	5 5	5	12746	3.7	462	1959 1960		15910 11955				14160 14035			13211 14565	
102259	3 28	61	11892	3.8	454	1953 1954 1955 1956 1957	9 12 8	13035 11159 11447 13089 14037	3.8 3.5 3.7	422 399 489						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

237

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECUROS NO.		TEST PCT.	FAT LB.	305-0AY (RECURDS NO.			YLARLY H RECOROS NO.		
						1958 1959 1960	HOLS 7 10 1	TE1N 13007 12859 8480	3.8 3.9 4.3	490 494 365	5 9 1	12278 12219 10430	484 446 374	5 7 1	1 1864 12325 14770	452 471 531
102260	1 382	581	11832	3.6	#5#	1952 1953 1954 1955 1956 1957 1958 1959 1960	33 30 29 17 21 99 189 146	11464 10963 11047 10870 10162 11396 12305 12265 13303	3.7 3.7 3.6 3.7 3.5 3.0 3.0 3.6	419 402 395 400 354 405 443 437 481	1 1 1 1 57 165 141	9510 13400 14440 13430 10370 12551 12576 12358 13010	322 476 487 489 380 456 457 446 469	1 1 52 135 111 14	12099 12873 12273 12543 12623 12965	424 476 443 454 455
102303	9 1	1	15120	3.8	573	1960	1	15120	3.8	573	1	15760	590			
102334	7 1	1	10250	3.5	355	1958	1	10250	3.5	355						
102445	3 15	20	12794	3.6	457	1957 1958 1959 1960	3 6 10 1	10413 13187 13434 13210	3.6 3.6 3.0 3.5	380 464 477 434	1 6 10 1	9550 13062 12880 14240	355 479 469 514	1 4 9 1	12055 12383 13446 14453	414 451 483 507
1024886	0 1	2	12045	3.8	460	1952 1953	1	11450 12640	3. y 3. (448 471						
1025209	5 35	88	11037	3.6	397	1952 1953 1954 1955 1956 1957 1958 1959	6 21 16 15 13 11 4 2	10518 10905 10972 11112 12003 11683 11908 11200	3.8 3.7 3.7 3.7 3.6 3.5 3.5	401 403 409 411 436 407 411 367	1 1 1 1 2 3 2	11710 12980 10770 12880 13310 10495 11810 12200	396 428 366 434 479 376 440 463	1 1 1 2 1	11456 12317 10758 12666 11358	413 435 366 457 425
102536	1 1	1	11810	3.5	419	1959	1	11810	3.5	419	1	13120	460			
1025792	2 1	2	13195	4.0	518	1958 1959	1	13210 13180	4.U 3.9	524 511	1	12290 13390	476 521	1	13080 14257	508 562
102590	2 1	1	14050	3.3	466	1959	1	14050	3.3	466	1	14970	546	1	14791	553
102011	5 14	19	13575	3.8	517	1958 1959 1960	5 10 4	12086 14377 12530	3.7 3.9 3.7	448 553 456	5 10 3	12778 13603 10540	468 501 372	5 8 3	13017 13334 11917	484 492 420
102641	0 1	1	11810	3.6	423	1954	1	11810	3.6	423						
102680	6 2	5	11833	3.6	424	1955 1959 1960	1 1 1	13530 9430 10840		490 315 398	1	9390 10340	332 390	1	9330 10508	332 3^5
102812.	3 1216	1566	12463	3.7	456	1952 1953 1954 1955 1956 1957 1958 1959 1960	19 33 24 14 6 59 437 868 100	12548 12620 12575 12962 13125 11981 12450 12664 12092	3.0 3.0 3.5 3.7 3.6 3.7 3.7	455 454 444 476 456 431 457 463 441	1 1 1 30 409 850	10110 13230 13050 12680 11752 12628 12711 12374	376 455 466 441 429 458 462 444	1 1 28 345 700 74	11271 11936 11748 12513 12963 12684	383 427 432 452 471 465
102826	0 3	3	12503	4.0	494	1957 1958 1959	1 1 1	9950 16650 10910	4.1 3.5 4.0	411 633 437	1	13440 9530	489 350			
103040	4 24	30	1407∠	3.5	491	1958 1959 1960	19 7	14540 13932 16371		502 484 567	17	13593 13697 13515	477 497 479	4 16 6	13732 13725 13887	480 499 496
103063	5 1	2	11710	4.3	490	1957 1958	1	13390 10030		555 439	1	12820 12330	458 450	1	13342	496
103064	0 Ι	1	11650	3.6	416	1958	1	11650	3.6	416						
103142	4 1	1	13710	4.1	568	1960	1	13710	4 - 1	368	1	12110	437			
103235	8 2	9	12443	3.5	431	1953 1954 1955 1956 1957	2 1 1 3	11906 11396 16050 13716 13740	3.5 3.5 3.6	421 395 566 516 505						
103302	4 218	256	12330	3.6	442	1958 1759 1760	54 171 31	12721 12474 10752		457 447 391	50 164 27	12485 12514 12437	455 452 451	39 124 22	12415 12764 12598	452 459 457
103303	2 2	2	13295	3.8	505	1959	2	13295	3.0	505	۷	12620	468	1	13419	523
103390	8 72	87	12254	3.7	454	1958 1959 1960		13370 12346 12363		458	16 61 6	14233 13387 15705	517 495 491		14474 13371 14150	528 490 513

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SENVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

238

DAUGHLER	AV r. R.AG r	87	SIRE

81.0.080	AVERAGE	RV	VIRE	HV	EHECHENING.	VLAU

SIRE NG.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NO.	L8.	TEST PCI.	FAT L8.	305-DAY (RECORDS NO.			YEARLY HI RECORDS NO.		FAT
1034466	119	191	11734	3.7	437	1953 1954 1955 1956 1957 1958 1959 1960	1 14 39 52 37 25 18	11610 10550 11624 11436 11942 12063 12066 11864	3.5 3.7 3.7 3.8 3.7 3.7 3.8 3.6	407 387 434 430 439 445 457 431	1 7 12 20 17 5	10570 13970 13083 13090 11901 12966 12708	431 541 474 476 437 465 459	4 6 11 18 14 5	11674 12421 12414 11649 12699 13381	430 448 455 428 459 480
1034467	303	365	12284	3.6	444	1958 1959 1960	60 264 41	12634 12410 11223	3.6 3.6 3.6	455 449 411	59 257 36	12972 12976 12620	472 472 460	53 204 33	12747 13094 12984	464 475 471
1035850	1	1	11880	3.3	391	1959	1	11880	3.5	391	1	10990	389	1	11848	419
1038118	3	4	11245	4.3	485	1958 1959 1960	1 1 2	10260 8010 12300	3.8 4.2 4.5	389 336 547	1 1 1	12620 10190 16330	430 351 613	1 1 2	9832 10355 15637	352 375 586
1038489	13	16	14041	3.7	521	1957 1958 1959 1960	2 7 6 1	13115 14429 14053 13160	3.6 3.8 3.7 3.6	462 540 517 476	2 7 6 1	12590 13524 13397 14340	436 486 464 526	1 5 6 1	12982 13095 13217 14061	425 474 452 520
1038509	1	1	10680	4.0	428	1959	1	10680	4.0	428	1	9630	363	1	12535	480
1038591	3	4	11638	3.5	399	1954 1955 1956 1960	1 1 1	12090 11470 11780 11200	3.4 3.8 3.7 3.2	410 430 433 355		10300	361	1	11303	416
1039074	1	1	7990	3.9	310	1959	1	7990	3.9	310	1	11120	400	1	10856	393
1039565	1	1	13190	4.7	615	1959	1	13190	4.7	615	1	11890	491			
104 1009	1	1	13530	3.7	502	1958	1	13530	3.7	502	1	13320	493	1	12611	483
1042139	8	10	12556	3.8	475	1958 1959	2 8	12260 12648	4.2 3.8	509 4 7 9	2 8	13680 14603	519 543	2 2	13320 15277	501 563
1042501	16	23	14289	3.5	50 0	1957 1958 1959	6 11	15537 14942 13407	3.5 3.4 3.5	546 501 469	3 6 11	12800 16433 13555	465 596 488	3 11	13353 14265	482 515
1045647	1	5	13784	4.0	557	1952 1953 1956 1957 1958	1 1 1 1	14640 17260 14430 12860 9730	3.9 4.0 4.0 4.5 3.8	570 694 577 575 370						
1046259	1	1	13700	3.4	467	1959	1	13700	3-4	467	1	10860	387	1	10998	39 8
1040678	3	7	11145	4.0	438	1954 1955 1956 1957	2 3 1 1	12370 10990 14080 14500	4.0 3.9 3.9 3.8	487 423 551 554						
1049547	606	725	13747	3.6	487	1958 1959 1960	148 509 68	14089 13809 13254	3.5 3.5 3.6	496 489 474	144 496 67	13213 12887 12290	481 469 449	128 393 59	12986 13087 12838	470 474 468
105∠808	144	195	13135	3.9	514	1958 1959 1960	59 122 14	13393 13049 13856	3.9 3.9 3.8	523 513 525	52 119 13	13216 12717 13172	481 463 481	45 102 10	12881 12965 13632	471 472 490
1053895	1	1	10280	3.6	371	1959	1	10280	3.6	371	1	11040	422	1	10355	395
1054406	110	} 4 4	12519	3.6	456	1955 1956 1957 1958 1959 1960	4 8 22 43 60 7	10653 12680 12334 12534 12565 15164	3.8 3.5 3.6 3.6 3.7 3.5	402 439 439 447 464 558	3 12 34 59 7	13380 12553 13318 12994 10847	477 471 486 474 386	3 10 29 46 4	13302 11154 12807 13158 13576	463 424 465 475 485
1055021	2	6	13709	3.5	480	1953 1954 1955 1956 1957 1959	1 1 1	12800 16210 17180 14570 13730 12520	3.3 3.6 3.4 3.4 3.5 3.6	424 577 585 500 476 447	1	12530	464			
1055398	1	1	7870	3.6	286	1960	1	7870	3.6	206	1	10070	357	1	11162	404
1055483	45	61	12745	3.8	483	1955 1956 1957 1958 1959 1960	2 8 9 18 21 3	12645 11999 11944 13997 12979	3.7 3.9 3.6 3.7 3.8 3.7	468 469 435 527 498 461	2 4 17 20 3	12170 13023 13437 12933 14963	426 479 499 472 553	1 5 16 18 2	12404 12901 12795 13155 14383	432 465 466 482 529
1056031	71	144	13297	3.6	472	1954 1955 1956 1957 1958 1959	14 29 34 23 22 18	11291 13319 13225 14518 14884 14177	3.7 3.5 3.6 3.5 3.5 3.6 3.7	413 470 468 509 514 508 461	4 5 7 16 16	13755 13820 12774 15649 14417 13965 11980	499 502 460 553 525 505 440	4 7 13 13	12072 12677 12907 14064 14733 13102	444 464 469 510 534 401

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

239

DAUGHTER AVERAGE BY SIRE

SIRE NU.	OAUGHTERS Nú.	RECORDS NO.		IEST PCT.	FAT L8.	FRESH YEAR	RECORES NO.	L8.	TEST PCT.	FAT L8.	RECORDS	MILK		YEARLY HE RECORDS NO.		FAT
105684	1 1	1	9360	3.5	325	1960	HOLS		2 5	7.16	,	0.440	210		11666	h 10
105688		478	12592		460	1955	4	9360	3.5	325	1	9/80	349	1	11554	419
						1956 1957 1958 1959 1960	19 61 152 214 25	12336 11972 12800 12896 13252	3.6 3.6	441 431 468 473 475	28 139 211 24	12423 12275 13426 12938 13135	438 443 491 475 487	6 26 120 160 25	11952 12286 13005 13416 13568	429 463 475 490 496
1061458	8 3	3	16 10	3.4	546	1959 1960	2 1	14590 19150	3.6 3.1	518 603	2	12750 13860	471 451	2 1	13451 14344	494 497
106 189	4 21	31	12837	3.7	478	1956 1957 1958 1959 1960	2 3 11 13 2	13925 12613 12956 12618 13160	3.0 3.7 3.7 3.8 3.8	493 464 479 481 498	1 1 9 12 2	16550 17000 13990 14036 14120	612 592 504 519 492	1 1 7 10	17113 15892 13784 13496	608 564 485 491
106191	1 24	34	12957	3.5	450	1956 1957 1958 1959	1 4 10 19	14640 10935 13183 13320	3.5 3.4 3.5 3.5	506 371 452 469	1 5 9 19	12560 12437 13429 13868	481 439 483 503	3 8 16	12651 13645 13808	456 488 503
1062747	7 1	2	14895	4.0	584	1958 1959		13680 16090	3.9 4.0	531 636	1	12270 12160	482 442	1	10192	383
1064716	6 1	1	13630	3.5	480	1959	1	13630	3.5	480	1	12030	401			
1064790	0 2	3	14708	3.7	5 38	1958 1959 1960	1	15190 14190 14260	3.6 3.9 3.0	539 559 512	1 1 1	13720 9130 11050	496 344 414	1	13832 12786	50 l 465
1066229	9 2	2	11655	3.5	403	1958 1959	1	11040 12270	3.4 3.5	380 425	}	78 > 0 10760	393 386	1	11194	409
106786	3 1	1	9810	3.4	338	1959	1	9810	5.4	338	1	9930	495	1	9091	408
106856	1 209	286	11919	3.6	426	1956 1957 1958 1959 1960	20 51 94 112 9	12124 11014 11974 12167 13750	3.6 3.6 3.6 3.6 3.5	420 400 431 433 475	9 2 I 80 10 7 9	12770 12129 12675 12606 12601	455 441 460 459 467	6 21 68 87 4	12530 11984 12711 12889 13843	447 451 457 466 476
1070395	5 1	1	15070	3.5	520	1956	1	1507υ	3.5	520						
1070850	0 2	2	13920	3.2	445	1959 1960	1	15160 12680	3.0	458 432	1	12040 18710	421 696	1	12982 13614	458 482
1073818	8 2	2	8440	3.9	328	1959	2	8440	3.9	528	2	11140	407			
107435	7 46	100	11663	5.6	419	1953 1954 1955 1956 1957 1958 1959	6 25 32 23 12 1	12502 11485 11894 11687 12624 11600 13460	3.5 3.6 3.6 3.5 3.5 3.5	442 403 430 423 447 409 521	1 1 1 2 5	6160 10340 12750 10895 12684 12020	256 405 454 389 486	2 2 5	10475 11772 11423	3/7 409 421
1074864	4 3 8	38	13558	3.8	515	1959 1960	30 8	12896 16044	3.8 3.9	492 601	29 7	12884 10024	47 I 365	24 6	12868 13240	465 483
1080777	7 5	11	12510	3.5	44 ∠	1954 1955 1956 1957 1958 1959	2 2 2 2 2 4	10216 12000 12635 13145 13500 10660	3.5 3.5 3.5 3.7	353 414 461 456 503 341	!	13690 10440	494 367	1	13832	50 I
1081270	0 цц	62	12361	3.8	470	1955 1956 1957 1958 1959 1960	3 7 13 26 8	11670 12118 10877 12358 12798 12533	3.9 3.8	440 470 411 473 494 478	1 4 11 26	12180 11963 13148 12420 13345 12491	437 434 481 455 493 458	1 2 3 9 17 5	12077 12138 13218 12306 13335 12227	429 434 479 447 484 452
1081681	4 31	49	11118	4.0	440	1955 1956 1957 1958 1959 1960	4 d 12 13 11	11823 10076 10666 11999 10684 17760	3.6 3.7 4.1 4.1 4.1 3.5	441 400 434 484 437 626	1 3 11 10	12590 12470 12030 13257 12771 15270	436 453 413 483 474 521	7 9	13374 13309 12780 13441 15380	456 463 470 497 526
1082020	0 2	3	14725	3.3	485	1958 1959	1 2	14450 14870	3.3 3.3	476 482	1 2	14250 12460	514 426	1 2	13396 13462	458 451
108289	1 7	9	14639	5.7	547	1958 1959	ц 5	16035 13230	3.8 3.7	602 491	4 5	14975 14136	550 514	14	14745 13410	542 484
1084039	9 8	14	13131	3.9	513	1955 1956 1957	1 3 3	13830 12913 13673	4.1 3.8	571 484 526	1 2 3	17290 13595 14420	628 492 517	1 2 3	15565 13990 13055	564 533

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREZUING ORGANIZATIONS--GROUPEU BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	OAUGHTERS NO.	RECORDS NO.			FAT L8.	FRESH YLAR	RECORDS NO.		TEST PCT.	FAT L8.	SUS-DAY RECORDS	MILK		YEARLY HE KECOROS NO.	MILK	
						1958 1959	H0E51	TE1N 14047 12770	4.1 4.0	570 506	3	13610 13800	510 516	3 4	13879 14020	515 521
1085978	8 479	564	14030	3.6	504	1954 1955 1956 1957 1958 1959	7 20 42 36 43 329 81	13253 14535 13192 15047 15646 14329 12609	3.4 3.6 3.6 3.0 3.5 3.0	458 521 469 542 553 516 454	5 7 11 36 321 76	14226 13626 14535 14616 13093 12053	503 489 529 521 479 436	5 5 11 32 276 70	12899 13036 13371 15118 13427 13335	463 471 480 544 490 483
108632	6 I	1	13170	3.8	496	1958	1	13170	3.8	496						
1086776	6 3	3	10623	3.6	387	1955 1956 1958	1	10040 13610 8220	3.4 4.1 3.2	343 358 265						
108797	4 119	140	13737	3.7	510	1958 1959 1960	21 93 20	14272 14093 12594	3.7 3.7 3.6	543 521 452	25 92 16	13809 13071 12559	52∠ 479 460	23 79 14	13237 13337 13169	491 492 479
108815	1 8	8	11329	3.7	414	1959 1960	2 6	15275 10013	3.0 3.7	581 359	2 5	14/00 9580	524 347	2	14100 13342	512 488
108870	7 4	16	12569	3.7	461	1956 1957 1958 1959	5 3 5 3	11748 11390 14444 12967	3.7 3.8 3.6 3.5	423 425 518 458	3 3 4 3	12340 13487 13350 12533	428 499 487 457	4 3 4 3	11617 13015 12137 12829	408 456 428 467
1088/0	9 14	17	11816	3.5	410	1956 1957 1958 1959 1960	6 4 2 4 1	10467 11138 12745 12788 15500	3.7 3.6 3.5 3.3 3.3	382 400 444 415 515	2 1 2 4 1	12595 12500 12920 13375 12420	470 438 456 471 415	2 1 1 4 1	13276 13385 11903 13399 14225	477 479 397 474 505
109025	8 7	7	13640	3.9	533	1959 1960	6 1	13460 14720	4.0 3.1	532 541	5 1	14844 13820	58 I 53 I	4	15563	610
109034	0 2	2	13145	3.9	511	1958 1959	1 1	12680 13610	4.2 3.6	537 485	1	11480 11400	414 413	1	9309 10148	325 376
109066	6 19	33	12133	3.7	440	1954 1955 1956 1957 1958 1959	6 11 5 6 2 3	10507 10846 14940 11453 16055 17393	3.7 3.6 3.6 3.6 3.5 3.5	385 391 529 404 562 603	1 1 3	15630 14810 14623	503 553 522	1 1 5	10649 13396 15267	4/4 484 545
109129	8 5	5	13690	3.7	509	1959	5	13690	3.7	509	4	12840	482			
109277	3 13	21	13318	3.5	469	1954 1955 1956 1957 1958 1959	1 4 3 7 4 2	10590 14750 11837 12397 15060 14285	3.8 3.7 3.4 3.4 3.4 3.6	406 546 410 417 516 509	2 2 5 4 2	15170 12075 11548 12543 13255	569 421 420 463 504	2 3 5 4 2	14040 11932 10974 14175 13642	519 425 394 518 515
109407	4 3	3	4550	3.6	161	1960	3	4550	3.6	161	1	4000	140	2	12633	446
109407	9 1	1	12220	4.2	510	1959	1	12220	4.2	510	1	14260	528	1	14595	541
109492	1 58	74	11777	3.8	ff ff ff	1955 1956 1957 1958 1959 1960	1 8 27 34 3	9910 10860 9925 12010 11975 15680	3.6 3.8 3.9 3.7 3.8 3.9	355 414 381 451 453 583	5 24 34 2	11044 13303 12772 13630	398 480 469 476	5 21 28 2	11722 12911 13008 13740	437 467 469 510
109663	lų 514	61	11705	3.7	430	1954 1955 1956 1957 1958 1959	12 20 15 6 4	11511 11347 11259 11480 13468 13485	3.8	420 427 420 426 483 455	1 2 1 1 4	14030 15060 13790 12240 12638 12070	438 503 495 456 457 438	3 1 2 4	13599 13276 12546 12630 12355	464 459 442 451 441
109947	1	1	13820	3.5	480	1958	1	13820	3.5	480	1	15870	589	1	13723	518
110019	3 2	3	12630	3.6	450	1958 1959	1 2	12800 12190	3.3 3.6	425 440	1 2	13610 12605	487 452	1 2	13189 13010	473 464
110465	·7 4	5	14810	4.0	586	1956 1957 1959	1 1 5	10300 12860 15887	4.5 4.4 3.8	462 567 610	ځ	14057	525	2	14061	510
110531	8 1	2	13195	4.4	577	1958 1959	1	11780 14610		515 639	1	14100 14330	494 507	1	13276 14235	472 514
110572	28 20	20	13354	3.6	483	1959 1960	16	13561 12525	3.6 3.6	493 447	- 10 4	12646 13385	466 456	13	13118 14410	484 500
1106//	'5 51	69	12178	3.7	445	1955 1956	2	8385 12270	3.8 3.6		3	11840	411	4	10587	394

1122159

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANICATIONS--GROUPED BY DRECE,

	DAUGHTER	AVERAGE	8Y 51	RE		R	ECORU AV	ERACE	8Y 51R	E EY	FRESHENTING	YEAR				
SIKL NU+	DAUGHTERS Nu.	RECORDS		TcST PCT.		FRESH YEAK	RECURDS NO.		FLST PCT.		SOS-DAY RECORDS		FAI	YEARLY HELORUS		FAR
						1957	HOLS	12458	3.0	440	4	13048	471	L ₄	12503	453
						1958 1959 1960	22 24 3	12069 13278 11500	3.1 3.7	449 463 419	19 24 3	13575 13390 11083	501 493 402	18	13461 13650 12906	49 1 49 9 40 2
1107436	95	180	11371	3.6	414	1953 1954 1955 1956 1957 1958 1959 1960	11 29 41 35 27 16 24 2	13279 11392 11036 11824 11584 11902 11504 11420	3.6 3.7 3.6 3.6 3.5 3.5	471 412 405 426 412 424 416 440	2 6 14 11 13 14 24 2	13200 12245 11734 12422 13819 11659 12005 14055	525 458 430 464 320 425 445 512	11 10 14 14 22 2	11905 11331 12272 11488 12128 13511	440 403 443 413 452 503
1109864	. 2	2	13245	4.0	526	1959 1960	1	14620 11870		529 522	1	13780 13750	54 I 5 I 4	1	14977 15500	55°
1111075	43	55	11708	3.7	43 0	1955 1956 1957 1958 1954 1960	1 3 4 14 25 6	10780 12340 11273 12278 11792 10610	3.7 3.5 3.8 3.7	418 443 395 459 436 386	1 3 12 25 1	10720 10930 13395 12562 12681	396 389 503 466 460	1 1 9 19 8	11489 11260 14017 12980 12095	427 417 517 476 440
111076	, 49	70	12882	3.6	465	1955 1956 1957 1958 1959 1960	1 7 5 21 31	13470 11964 12650 13167 13093 11816	3.5 3.7 3.6	462 435 427 481 475 427	3 2 20 30	13067 13265 13421 12920 11932	517 473 494 471 425	1 3 1 18 25 5	13745 12673 14628 12608 13235 12230	524 458 523 468 483 444
11221	33	33	16151	3.6	589	1959 1960	19 14	16600 15541		000 265	19	13505 14492	514 543	16 14	13930 14433	5 F 5 S
113278	3 71	76	12602	3.7	463	1956 1957 1958 1959 1960	6 19 26 37 4	12135 11359 13704 12777 13285	3.7 3.0 3.7	433 420 498 471 473	1 10 25 38 4	12170 12836 13234 12806 13010	491 463 485 469 472	1 8 21 31 4	12323 10910 12444 13061 13271	44 37 45 47 40
11133)	1	ı	18230	3.3	608	1959	1	18230	3.3	008	1	14650	497	1	13036	45
1113559) ել ել	79	10675	3.7	392	1954 1955 1956 1957 1958 1959 1960	22 20 15 5 11 5	10508 11189 10727 11813 10256 11894 10800	3.8 3.7 3.7 3.7	395 416 393 432 376 436 368	2 1 2 9 5	11965 11430 13460 11028 12630 12730	456 443 493 392 480 432	3 1 2 4 4	11565 12851 12508 10279 12227 13244	41: 47: 46: 37: 44:
113562	27	51	12042	3.7	450	1954 1955 1956 1957 1958 1959	16 12 / 8 4	12609 12758 13619 10761 11370 13323	3. / 3. / 3. 8 3. 7	475 475 515 408 414 483	3 3 3 2 4	14120 13127 13317 14050 14155 14110	537 523 502 511 511 513	2 3 3 2 2	13636 13120 13803 11941 15026	48 51 43
1115014	222	297	12638	3.6	460	1954 1955 1956 1957 1958 1959	7 24 25 27 48 133 33	12784 11818 12332 12929 13370 12812	3.6 3.6 3.7 3.6 3.6	440 429 443 474 482 404	3 6 11 41 130 32	11347 12168 11647 12702 12874 12271	460 467	4 6 9 35 115 31	12658 12944 12707 12620 13126 13023	45 47 45 47
1115426	b 1	2	10570	3.9	412	1956 1957	1	10740	4.0 3.8	430 393	- 1	12670 12350			11859 11648	
111568	7 1	1	12490	3.9	491	1958	1	12490	3.9	491	1	17370	o21	1	10955	41
111607	17	32	14196	3.7	512	1954 1955 1956 1957 1958 1959	6 9 1 3 3 3	13866 12520 13287	3.5 3.5	481 481 486 475 488 501	1 i 3 3	14440 13130 13223 12810	497	2 1 1 3 3	11898 9875 13865 13236 13073	341 49.
111926	3 92	196	11478	3.7	451	1953 1954 1955 1956 1957 1958 1959	8 37 50 44 24 20 12	11174 10769 11475 11650 12139 11346 12872 13060	3.9 4.0 3.9 3.9	479 423 452 456 474 442 506 580	7 5 8 15	11107 11696 13782 13751 12607 13198	400 430 532 520 489 493	6 7		41 46 46 51
1119514	4 90	116	12953	3.4	445	1954 1955 1956 1957 1958 1959	1 6 10 28 58	12750 11223 11017 11595 13450 13476	3.8 3.6 3.5 3.5 3.4	397 405 467 459	25 57	10614 12902 13002 13113	476 470	20	12666 11767 13086 13244 12717	4.1 47 48
										-			1			

1959

1 13940 3.6 505

1 13940 3.6 505

1 11880 476

1 13080 543

TABLE 13.---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHLNING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY STRE

SINE NO.	UAUGHTERS NO.	NO.		TEST PCT.		FRESH YEAK	RECORUS NO.	L8.	TEST PCI.		305-DAY (RECURDS YO.		FAT	YEARLY HI KLCOKOS NO.		FAT
						1000	HOLS.			0				,		
1122266		1 4	15820	3.7	580 437	1959 1958	2	15820	3.6	516	1 2	15220	517	1	14977	457
112471.	, ,	4	12220	3.0	431	1959 1960	1	6380 11790	4.0	258 445	1 1	12420	456 487	į	13080	480
1125395	66	78	11989	3.7	440	1956 1957 1958 1959 1960	2 3 23 41 9	12675 11583 11877 12660 10180	3.1	485 421 427 466 379		14750 12693 12952 11466	510 470 482 416	20 29 7	12381 13360 13178	454 490 436
1127372	2 40	62	11654	j.8	438	1955 1956 1957 1958 1959 1960	15 11 8 16 9 3	12097 10283 13228 11579 12335 12733	3.4 3.6 3.8	450 399 478 439 478 478	2 3 2 11 0 3	10460 17500 14680 12201 13158 12443	361 615 516 443 498 453	2 2 3 10 5 2	10366 12317 13472 10997 12755 13952	401 400 502 377 467 505
1132993	3 97	132	12734	3.7	467	1955 1956 1957 1955 1959 1960	10 15 45 51 7	12725 12477 12592 13599 12704 13374	3.6 3.7 3.7	457 458 450 498 465 495	3 / 39 51 /	10827 13107 13127 12384 13513	401 475 481 462 502	2 6 33 42 6	11707 11676 12735 12640 13729	427 427 468 466 517
1134953	3 97	139	12225	3.7	445	1955 1956 1957 1956 1959 1960	6 37 36 24 31 5	12823 11285 11715 13610 13292 12122		476 412 428 507 475 431	1 4 9 22 30 5	13250 10785 11224 12238 12652 11168	491 385 404 453 456 401	1 5 10 11 27 4	10039 11436 11494 12793 12840 11246	357 405 445 462 470 406
113665	5 31	40	11204	3.6	395	1955 1956 1957 1958 1959	3 lo 8 8 5	9180 10633 10454 12653 12298	3.8 3.6 3.5 3.0 3.4	350 379 358 452 415	1 1 1 6	7340 12010 12779 11338	276 425 463 431	5 5	1206A 12382	432 447
114076	3 186	186	13308	3.8	505	1959 1960	131 55	13270 13400	3.b 3.b	509	129 48	12934 12869	476 465	109 48	13294 13505	404 471
114130	5 13	13	11166	3.8	414	1959 1960	11	11800 11051	3.7	440 409	3	13755 10651	50 s 34 s	1 11	13342 14097	491 513
1143571	8 145	163	12483	3.8	472	1956 1957 1958 1959 1960	17 17 10 87 32	13002 12964 15244 12811 11233	3.8 3.7 3.8 3.9	493 487 568 482 434	3 5 9 83 29	13750 13812 12574 12906 11735	502 487 462 468 423	3 6 8 69 24	12957 12879 11639 13145 12789	4/1 465 924 4/6 466
1143579	9 9	17	12641	3.4	429	1955 1956 1957 1958	7 1 1 2	12136 12220 14970 10605	3.4 3.4 3.4 3.4	414 422 506 357	1	13450	471	1	12273	450
114578	3 1	1	15980	3.6	580	1959	1	15986	3.0	580	1	13660	487	1	13734	479
114611.	3 1	ı	11440	3.8	431	1958	1	11410	3.8	431	1	11650	423	1	930⊋	335
114020	7 1	1	12520	3.5	434	1955	1	12520	3.5	434						
114946	0 25	25	11529	3.6	417	1959 1960	17 8	11966 10600		433 384	17 8	13625 11+79	493 445	14	1286z 12524	447
114983.	3 22	29	12998	3.9	501	1954 1955 1956 1957 1958 1959 1960	1 2 1 3 4 17 1	13650 12535 13716 13197 13608 13069 11780	4.0 4.0 3.9 3.8 3.9	557 505 554 512 517 508 399	4 17	13450 12718 13365 13900	458 466 511 477	2 3 15	13031 13625 13621	կկց 512 513
115131	1 2	2	11335	4.2	471	1958 1959	i ì	14190 8480		571 371	1	14500 11100	932 422	1	13222 10453	492 398
115134	9 2	3	11475	3.7	422	1959	2 1	11510 10770		427 345	2	13530 13050	498 467	2 1	1366⊋ 12622	501 455
115186.	3 25	21	12480	3.8	474	1959 1960	23 u	12643 12753	3.0 3.7	482 4 7 0	20	12o47 130o0	461 492	20 3	13489 13073	492 480
115374	0 27	33	11362	5.7	410	1958 1959 1960	10 19 4	12560 1109c 8948	3.0	457 416 317	10 16 4	11659 12549 8088	435 479 403	9 17 4	11673 12813 10857	437 475 406
115401	7 2	lą	128/5	3.5	447	1955 1956 1958 1959	1 1 1	17000 14170 9890 10445	3.7	569 528 339 350	1	11570 12050		1	12470	446

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

NI W YORK

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SCRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

244

DAUGHTER AVERAGE BY SIRE

51kc Nu.	UAUGHTER . NO.	RECURDS NO.	MILK LB.		FAT LB.	FRESH YEAR	RLCURUS NO.		TEST PCT.	FAT LB.	305-DAY RECORDS	MILK		YEARLY HI RECORDS NO.	MILK	
						1958 1959 1960	37 30 0	12214 12928 11800		452 469 432	33 37 B	12775 12909 12214	466 466 430	29 30 B	12482 12843 12722	443 467 451
1181675	5 154	227	12875	3.5	453	1955 1956 1957 1958 1959 1960	6 53 60 42 53	11307 12008 12895 13625 13409 14718	3.6 3.6 3.5 3.5 3.5	402 428 450 471 468 508	1 12 33 56 53 13	15240 12444 12932 13306 12934 12919	541 447 460 473 463 449	2 11 31 22 39 11	12699 11579 12217 12559 13166 13757	466 412 450 448 472 482
116366	3	5	12438	3.7	452	1956 1957	2 3	9500 13807	3.0 3.7	337 506						
1184848	3 28	34	13541	3.8	511	1958 1959 1960	5 23 6	13810 13132 14382	3.8 3.8	522 494 546	5 23 4	13264 13130 14120	491 481 497	3 17 6	12444 13682 13454	472 504 496
119015	1 38	40	13312	3.7	494	1958 1959 1960	3 5 3	12265 13359 12673	3.8 3.7 3.9	460 496 486	3 4 3	13670 13170 13117	508 476 474	2 30 3	13789 13389 12917	512 482 478
1191920	180	228	12530	3.6	451	1956 1957 1958 1959 1960	12 54 74 83 5	12583 12908 12076 12817 13536	3.7 3.6 3.6 3.6 3.6	460 464 436 460 482	4 29 63 82 5	12985 12606 12494 13643 12978	459 452 453 470 462	3 21 53 66 4	13073 12404 12571 13159 13091	458 443 453 473 476
1192779	7 10	14	13434	3.6	485	1957 1958 1959	2 4 8	14776 14163 12596	3.8 3.0 3.6	547 504 448	2 4 8	13150 12188 12868	477 449 480	1 3 6	12524 12564 12753	506 468 4//
119276	4 2	2	11960	3.6	426	1956 1957	1	11930 12030	3.7 3.4	441 411	1	11460	405	1	11151	420
119278	4	4	11513	3.9	440	1959 1960	2	10260 12765	4.2	428 451	2 2	14 175 129 15	515 483	2 2	13772 12633	503 477
119294	5 3	3	10227	3.7	373	1959	3	10227	3.7	373	3	11543	421	2	12781	479
119393	4 13	16	13108	3.5	455	1958 1959 1960	1 13 2	16260 13082 13280	3.4 3.5 3.4	547 455 453	1 13 2	14910 13069 13325	527 462 492	8	13050 12840	461 488
119416	5 15	19	12454	3.B	46 8	1958 1959 1960	10 1	11844 12660 14470	3.7 3.8 3.9	431 483 567	9	12376 13128	443 473	6 7 1	11322 13600 13320	499 492
119469	1 43	66	13624	3.4	462	1957 1958 1959 1960	10 28 25 3	13795 13801 13500 11430	3.4 3.4 3.5 3.6	464 472 464 411	7 2 1 24 2	13400 12644 12697 11085	491 459 460 391	6 25 19 2	12484 12305 12696 11413	461 449 461 402
1200281	В 11	13	12468	4.0	497	1958 1959	3 10	10963 13126	3.9 4.0	424 523	3 10	11580 13545	435 513	2 10	11936 13588	456 515
120227	5 4	Ц	1,1 720	3.9	463	1959 1960	2 2	10575 12865	3.6	379 547	2 2	12380 14295	446 547	2 2	1310 <i>2</i> 13969	477 524
120405	2 2	2	14010	3.2	450	1957 1958	1	16370 11650	3.3 3.1	538 361						
120601	7 1	1	17560	3.5	623	1959	1	17560	3.5	623	1	14030	529	1	14661	564
121132	5 3	3	11360	3.7	427	1958 1959 1960	1	11580 8830 13 7 30	3.7 3.7 3.6	453 327 500	1	10050 14620	403 523	1	11314 15304	413 574
121210	2 2	2	13150	3.7	47b	1958 1959	1	10600 15700	4.1 3.3	437 519	1	11940 13650	424 500	1	11064 12611	417 474
121262	3 2	2	13665	3.9	529	1959	2	13665	3.9	329	2	13960	533	2	14650	563
121262	4 10	12	11856	3.9	463	1957 1958 1959 1960	2 6 2 2	13635 12252 9445 9825	3.0	560 470 338 335	4 2 2	12755 9730 9410	459 341 335	2 1 2	132 2 2 9211 9614	
121568	6 1	2	14425	4.2	601	1958 1959	1	14610 14240	4.3	626 576	1	15600 15960	543 554	1	15740	534
121569	5 70	90	12434	3.6	447	1957 1958 1959 1960	1 36 45 ช	9880 12179 13082 11630	3.7 3.6	396 446 468 400		11500 12514 12869 13209	449 456 466 469	1 31 34 7	11565 12344 12931 13613	44 <i>1</i> 468
121612	3 104	137	11931	3.9	460	1957 1958 1959 1960	14 57 62 4	12147 11746 12576 13125	3.9	467 458 465 517	8 52 59 4	13253 12558 12779 12045	469 463 467 425	8 42 50 1	12504 12674 12907 13963	453 463 476 472
121012	ų 30	38	125 20	3.4	430	1957 1958 1959	20 11	11148 12657 13640	3.5	366 437 438	2 16 11	12400 12642 13060		2 14 9	11979 12498 13018	458

N. W YURK

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

51ĸ∟ N0•	UAUGHTERS NU.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY RECORDS 140.			YEARLY H RECORDS NO.		
						1960	HOLS1	TEIN 13910	3.5	484	3	13067	472	3	13603	487
1216908	3 1	1	14380	3.8	548	1959		14380	3.8	548	1	12690	460	1	12110	4 59
1216909	7	7	11697	3.4	403	1959	7	11697	3.4	403	7	12391	438	3	12306	423
1216957	7 56	61	13173	3.8	495	1958 1959 1960	1 44 16	5850 13260 13252	3-4 3-5 3-7	200 505 483	1 44 14	12480 13235 13855	485 485 502	35 11	13403 13400	474 488
1224123	8	9	10815	3.9	419	1958 1959 1960	2 6 1	8635 11453 11060	4.4 3.8 3.6	378 442 403	2 6 1	11285 12440 10430	429 459 382	5 1	12258 11249	448 423
12243 13	3 29	33	13722	3.6	491	1957 1958 1959 1960	1 10 20 2	12900 14111 13445 15550	3.7 3.6 3.6 3.6	477 500 480 560	10 17 2	13818 13079 14280	520 485 513	10 14 2	13371 13345 14143	493 490 520
1224521	10	10	11336	3.6	406	1959 1960	7 3	10933 122 7 7	3.6 3.6	394 435	7 3	13236 12767	480 456	5 2	13738 12781	503 469
1220701	1	1	12670	3.8	485	1958	1	12670	3.8	485						
122 / 1 02		1	14200		624	1958	1	14200	4 - 4	624	1	14170	476			
1229288	35	44	12097	3.7	444	1958 1959 1960	10 30 4	12529 12141 10253	3.8 3.7 3.5	467 446 353	10 29 4	12947 12626 12840	477 455 447	7 25 3	13044 12772 12662	474 465 448
1230406	2	2	10590	3.8	391	1959	2	10590	3.8	391	2	127 00	445	1	13462	451
1236249	3	3	11127	3.8	428	1959 1960	2 1	12610 8160	4.U 3.5	4 <i>1</i> 9 286	2	13060 12910	492 432	2 1	13407 9941	493 342
1239208	3 2	2	11635	3.7	425	1959 1960	1	13030 10240	5.6 3.7	465 384	1	17020 14560	593 523	1	14497 13472	510 482
1237885	5 54	68	11825	3.9	453	1958 1959 1960	16 44 8	12774 11797 10975	3.8 3.9	476 454 418	15 44 7	12889 12611 11723	479 456 420	16 31 6	13213 12766 12528	489 463 459
1239886	86	107	13581	3.7	505	1958 1959 1960	26 70 11	13426 13551 14201	3.7 3.7 3.0	495 505 516	23 67 11	13085 12922 12879	476 468 460	23 57 9	12630 13053 12967	462 473 469
1240095	5	5	12696	3.4	432	1959	5	12696	3.4	432	5	13440	496	5	13985	520
1240125	60	68	13990	3.6	507	1958 1959 1960	9 57 2	12787 14020 11710	3.7 3.6 3.5	470 508 414	9 54 2	13021 12407 9725	471 452 319	8 42 2	12355 12584 11620	449 454 401
1241982	2 53	67	13302	3.5	460	1958 1959 1960	20 41 6	13003 13510 13485	3.4 3.5 3.5	442 468 470	18 40 6	12349 12607 12482	446 458 448	16 33 5	11882 12506 12202	425 461 449
1242163	3 25	27	14354	3.4	485	1958 1959 1960	4 22 i	15835 14239 14960	3.4 3.4 3.6	531 481 543	14 22 1	13000 13606 13930	475 489 542	4 20	13088 13097	468 474
1242164	38	45	12181	3.6	436	1958 1959 1960	15 28 2	12169 12070 14885	3.6 3.6 3.6	445 428 524	15 27 2	12757 12304 12750	476 456 467	13 20 1	12716 12752 11380	468 467 419
1244917	7 22	23	13778	3.5	484	1959 1960	20 3	13573 14727	3.5 3.5	477 511	19 3	12646 14157	460 506	16	12829 13905	473 497
1245520	59	74	13844	3.6	497	1958 1959 1960	16 49 9	13820 14010 13506	3.5 3.6 3.5	486 507 472	16 49 9	13027 13084 12437	477 478 459	13 41 9	12977 13219 13359	474 481 493
1246215	35	42	11376	3.7	421	1958 1959 1960	8 32 ∠	10451 11585 10605	3.7	382 427 419	7 32 2	13170 12792 13035	485 461 458	6 28 2	13413 13171 13222	492 478 467
1246450) 11	13	11862	3.6	427	1958 1959 1960	2 9 2	13445 12473 9385	3.4 3.7 3.0	450 452 334	2 9 2	14045 13538 13495	493 492 520	2 7 1	14448 13929 13789	515 494 512
124796	3 23	23	13614	3.4	477	1959 1960	19 4	13835 12568	3.4	482 453	19 4	12809 13135	474 484	18	12716 13047	470 483
124831	i 4	6	14 165	3.8	528	1958 1959	2 4	14080 14148	3.8 3.8	531 529	2	13645 12598	510 470	2 2	13658 13614	526 526
1249318	3 59	59	13300	3.6	473	1959 1960	49 10	13502 12306	3.6 3.6	481 435	49 10	12910 11682	468 428	3 9 6	13013 13276	470 479
1249434	4 2	2	13320	3.7	486	1960	2	13320	3.1	486	2	10190	381	2	12917	486
124969	7 2	2	11570	3.7	415	1959	2	11570	3.7	415	2	12235	440	2	12688	447
1252931	4 36	39	14454	3.7	525	1958 1959	3 30	14870 14466		53 I 527	3 30	13767 13714	48 I 494	3 26	13712 13687	484 495

TABLE 15.--GAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

LAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUCHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.	MILK L8.		FAT L8.	305-DAY RECORDS	ONTEMP MILK LG.	AV. FAT L8.	YEARLY HI RECOROS NO.		
						1960	HOLS	TEIN 14135	3.7	518	5	11408	423	6	13173	491
1254663	3 30	31	13003	3.5	451	1959 1960	29 2	13085 12 73 0	3.5 3.4	454 429	28 2	12206 13745	444 502	26 2	12386 14154	448 511
1254645	55	64	12015	3.7	443	1958 1959 1960	7 51 6	13406 11991 10845	3.6 3.7 5.8	484 443 403	7 5 I 5	12419 12168 12192	445 444 428	6 39 5	13427 12398 13065	486 450 474
1255099	9 33	34	12571	3.7	460	1959 1960	33 1	12547 12300	3.7 3.9	458 481	32 1	12605 11890	457 436	23 1	12780 12034	464 438
126046	1 2	2	14900	3.4	508	1959	2	14900	3.4	508	2	13010	444	2	13462	451
1261298	3 55	56	11615	3.8	436	1959 1960	40 16	11893 10608	3.6 3.8	452 396	38 14	12416 12711	454 465	31 13	12907 13039	475 473
1262324	+ 16	16	14021	3.7	524	1959 1960	13 3	14008 14077	3.7 3.5	531 493	12	12974 10683	466 378	10	12/83 12960	46∠ 468
1262609	9 1	1	8410	3.4	289	1960	1	8410	3.4	289				1	15685	589
126322	3 8	9	13664	3.6	507	1958 1959 1960	1 4 4	11940 12265 15195	3.6 3.1	420 440 579	1 4 1	11740 12198 12490	431 475 463	1 4 2	12644 12827 12950	460 486 479
126383	+ 15	15	13770	3.9	541	1959	15	13770	3.9	541	15	13309	495	11	13463	502
120383	5 12	12	13028	3.6	470	1959 1960	8	12644 13795	3.5 3.8	447 516	8	13475 11515	480 435	8 2	13181 12568	475 491
126444	7 13	13	11760	3.9	462	1959 1960	10 3	12820 8227	4.0 3.8	509 305	10 2	13377 10460	503 388	7 3	13584 11725	488 439
126472	5 14	14	12606	3.9	488	1959 1960	13 1	12735 10920	3.9 3.8	493 411	13 1	13985 10170	509 355	11	13512 10824	500 383
126813	1 41	41	12256	3.9	471	1959 1960	34 7	12300 12044	3.9 3.8	473 459	32 6	13187 11943	483 431	3U 7	13554 12432	493 445
126954	1 3	3	12757	3.0	455	1959 1960	1 2	9960 14155	3.4 3.7	343 511	1 2	10450 12550	372 424	1 2	11249 13009	398 466
126996	8 1	1	6200	3.9	241	1960	1	6200	3.9	241	1	6750	241	1	11412	412
127175	8 25	25	11958	3.6	430	1959 1960	12 13	12988 11007	3.7 3.5	473 390	12 11	13820 12868	504 469	11 13	13252 13141	490 477
127201.	3 17	17	11609	3.5	406	1959 1960	7 10	13123 10549	3.4 3.6	447 378	6 8	12653 11071	435 419	6	13195 13191	464 480
1275/5	5 1	1	8580	3.6	312	1960	1	8580	3.6	312	1	10690	415			
127511.	3 6	6	10930	3.6	391	1959 1960	3 3	11380 10480	3.7 3.4	421 360	3 3	12763 11613	474 424	3 3	14257 12161	519 442
127560	4 1	1	10270	4.0	408	1960	1	10270	4.0	408				1	12568	443
127628	6 13	13	11185	3.6	404	1959 1960	6	11458 10950	3.6 3.7	409 400	6	11813 11376	429 403	6	11884 13106	424 475
127089	4 I	1	9700	3.3	321	1960	1	9700	3.3	321	1	15730	588	1	11521	415
127695	9 1	1	12860	3.4	433	1960	1	12860	3.4	433	I	13030	486	1	17822	634
128169	9 6	6	9640	3.7	362	1960	6	9640	3.7	362	5	7296	281	5	12252	458
128595	2 3	3	12027	5.8	455	1960	3	12027	3.8	455	1	12700	422	3	13923	519
128863.	3 4	4	5593	3.7	201	1960	4	5593	3.7	201				ц	13001	478

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	DAGGIII EK		01 31			, in	LCOKO AV	LIVAGE) I 31K	E DI	FRESHENING	TEAR				
SIRE NO.	GAUGHTERS NO.	RECURDS NO.	MILK	TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-DAY C RECORDS NO.	ONTLMF MILK L8.	FAI	YEARLY HE RECUROS NO.	RO AVE MILK LB.	FAT
							JER	SEY								
35300	5 3	5	5413	5.3	270	1947 1948	1	5560 3780	5.4	284 240						
36845	4 1	3	9290	5.5	511	1947	3	9290	5.5	511						
37536	4 41	139	7814	5.1	393	1948 1949 1950 1951 1952 1953	1 6 16 16 25 19	8010 6935 7683 8192 7878 8481 7887	5.1 4.9 5.1 5.2 5.1 5.1	500 350 374 418 409 429 403	2 1 2	7940 8320 5825	398 426 328			
						1955 1956 1957	16 12	7889 7880 8444	5.0 5.0 5.1	393 388 422	2	5895	316			
						1958	4	8333	4.8	399	1	8240	423	1	8546	452
37742	5 1	1	3760	4.6	172	1950	1	3760	4 - 6	172	1	3760	172			
37787	2 10	ff ff	7596	5.5	414	1948 1949 1950 1951 1952 1953 1954 1955	2 5 11 5 5 4 5 6	5550 8741 7878 7272 8866 8478 8536 7082 4780	5.3 5.6 5.6 5.4 5.3 5.5 5.2 4.4	296 486 437 402 477 456 465 370 212	1	9400	324			
385252	2 1	2	7215	6.6	476	1951 1952	-	6750 7680	6.1 7.0	409 542						
39491	5 1	3	8663	4.6	400	1958 1959	2 1	7630 10730		35.3 495				1	10617	463
39990	3 1	3	10537	5.3	557	1958 1959	2	1051u 10590	5+3 5+2	56 I 548				2	10017 10646	445 472
40197	2 1	4	6770	5.6	379	1958 1959	2 2	8430 5110		469 289	1	9310 9230	486 459	1 2	9483 8093	
403320	D 4	9	6818	5.2	357	1951 1952 1953 1954 1955	1 2 1 1 2 2	6790 7635 7420 7490 7265 6170	5.3 5.2 4.6 5.5 5.2 4.9	362 396 356 412 383 302						
40459	b 15	58	73 82	5.3	391	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 9 9 7 8 8 6 6 2 2	6919 7438 7829		382 391 392 360 395 401 438 407 360 287	I 1 1 1 1 1	7480 5940 6290 6090 5050 6700 6220 5680	401 302 330 313 304 351 302 322	1	6496 7347	
40636	8 1	1	9250	5.6	516	1952	1	9250	5.6	516						
40797	1 1	4	7318	5.7	417	1954 1955 1956 1957	1 1 1	7940 6470	5.9 6.0 5.7 5.1		1 1 1	7960 7260 6610 5520	450 402 360 281	1	6496 7347	325 378
40954	3 15	50	7877	5.2	409	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	8 5 4 7 7 5 4 2 1 1	9004 7298	5.4							
4 l v 4 S	8 I2	36	7491	5.0	374	1947 1948 1949 1950 1951 1952 1953 1954 1955	1 1 3 5 6 6 6 7 3 3	5320 4850 8327 8114 6700 7742 7847 6033 7577 9460	5.1 4.9 5.2 5.2 5.2	262 246 435 410 328 400 400 312 396 452						

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICL IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE 8Y SIRE

	DAUGHTER	MAEKAGE	01 21K	C		K	ECORO AVI	CRASE D	1 31K	C 01 1	FKE SHENING					
SIRL NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAK	RECOROS NO.		TEST PCT.		305-DAY C RECORDS NO.	MILK		YEARLY HE RECOROS NO.		FAT
							JEK	SEY								
412602	2 1	1	5 380	6.7	361	1955	1	5380	6.7	361				1	6954	402
413671	8 13	36	7453	5.3	397	1950 1951 1952 1953 1954 1955 1956	6 7 7 3 3 4 3	6987 8027 8138	5.5	483 480 425	1	8550	422	2	8312	ԱԱ
420752	2 9	33	6873	5.2	361	1948 1949 1950 1951 1952 1953 1954 1955 1956	4 9 2 5 3 3 3 2 1	6687 6710 7172 8297 8727 8720	5.3 5.2 5.6 5.8 5.7 5.7 5.4 5.7 6.1 5.8	350 3/6						
421324	4 2	6	5512	6.3	340	1947 1948 1949	4 1 1	4788 5630 7820	6.1 5.9 6.5	294 331 509						
422981	8 158	420	7300	5.4	393	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 14 39 51 52 56 49 53 40 27 24 8	7372 7230 7361 7492	5.2 5.4 5.5 5.5 5.5 5.5	355 387 411 405 400 396 393 403 404 397 438 424			427 385	6 3 7 9 6 4	6863 7365 8245 7888 7903 8415	365 406 442 402 400 425
42312	3 1	1	10020	4.4	445	1959	1	10020	4 - 4	445	1	11400	446	1	11325	458
42436	9 38	93	7083	5.6	393	1950 1951 1952 1953 1954 1955 1956 1957	11 14 7 16 15 9 12 5	6586 7262 6381 6929 7310 7298 7663 7260 7545	5.7 5.6 5.7 5.4 5.5 5.4 5.2 5.7	378 395 357 388 387 396 413 367 428	2	7660	397	2	8028	429
42570	в і	1	6580	5.0	329	1954	1	6580	5.0	329						
42596	0 1	1	7500	5.2	394	1955	1	7580	5.2	394						
43119	6 2	7	6470	4.9	319	1952 1953 1954 1955 1956 1957	1 2 1 1 1	6390 6580 7540 7050 4680 4760	5.0 4.9 4.7 4.8 4.7	317 324 354 338 220 227						
43181	9 1	2	4340	5.2	223	1957 1958	1	3320 5360	5.3	175 270						
43213	8 2	3	9743	5.1	497	1951 1953 1954	1 1 1	10000 11240 7730		511 608 358						
43487	8 I	3	6690	5.3	354	1953 1954 1955	1 1 1	6080 7820 6170	5.4 5.2 5.3	331 405 326						
43555	7 і	7	7289	5.6	408	1952 1953 1954 1955 1956 1957 1958	1 1 1 1	9330	5.8 5.8 5.0	460 406 429 542 376 308 336						
43596	3 57	185	7357	5.4	394	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 12 23 31 22 30 23 16 15 7	7361 7066 8053	5.6 5.5 5.5 5.5 5.4 5.3 5.2 5.1 5.5	405 384 426	2 2 1 2 1 2 1	8000 7425 5920 9255 8210 8090 9360	430 418 316 505 466 425 538	2 1 2 1	7690 8175 8339 9102	4∠6 400 468 489

NEW YURK

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHCHING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRL NO.	DAUGHTERS No.	RECORDS NO.			FAT L8.	FRESH YEAR	KECOKOS NO.	LB.	TEST PCT.		305-DAY C RECORUS NO.		FAT	YEARLY HE RECOROS NO.		FAT
43771	1 1	3	7713	1. 4	7.0	1955	JER 2			407						
43111		3	1113	4.0	358	1957	1	8480 6180	4.2	260						
43816	5 25	105	9147	5.3	477	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	2 9 12 16 11 14 10 6 4 3 2	9030 9103 9606 9534 9271 9923 9919 9209 9640 9605 9477 8815	5.4	438 487 503 498 485 500 508 459 467 472 491 422 522	1 1	/740 7540 8400	405 405 442	1 1 2	7663 7881 8388	407 412 415
43817.	2 1	Ŷ	7920	5.1	403	1948 1949 1950 1951 1952 1953 1954 1955	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6880 8970 8610 7960 9540 7810 7050 8040 6420		336 486 452 428 483 392 341 388 320						
43640	0 2	2	6635	5.7	371	1953	2	6635	5.1	377						
43958	8 2	10	6212	5.4	324	1949 1950 1951 1952 1953 1954 1955	1 1 2 1 2 1		5.4 5.3 5.1 5.4 5.1 5.3 4.9	412 413 385 316 356 334 258 339						
44110	7 1	3	6627	5.5	362	1954 1955 1956	i 1 1	6730 7200 5950	5.1 5.3 5.4	383 382 321						
44216	7 65	144	7822	4.9	375	1951 1952 1953 1954 1955 1956 1957 1958 1960	2 12 29 28 28 25 12 7	7395 7733 7942 7884 7259 8058 7854 7643	5.3 4.9 4.9 4.9 5.0 4.8 4.7 4.6	390 383 383 387 363 389 363 353 457	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8250 9780 9950 10830 8720 7120 7928 7740	418 506 506 536 405 348 379 431	1 2 1 3 1	9843 7576 6573 8012 9025	518 394 320 364 473
44359	1 1	4	8228	5.3	435	1949 1950 1951 1952	1 1 1 1	8130 8920 8200 7660	5.1 5.2 5.3 5.4	415 461 438 417						
44446	8 78	153	7367	5.2	381	1953 1954 1955 1956 1957 1958 1959	10 29 46 35 12 12 6 3	8048 6860 7388 7710 8118 7181 8412 9663	5.1 5.3 5.1 5.2 5.2 5.3 5.2 5.0	404 358 377 396 420 382 434 482	1 2 2 2 1	8820 8975 8200 8475 7980	484 470 427 449 421	1 2 1 5 4	8437 9309 8644 7892 8344 8099	445 493 462 380 428 411
44495	8 38	107	7038	5.3	370	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 19 25 22 16 10 6 3	7333 7038 7335	5.2 5.3 5.2 5.3		1	8080 8820	432 484	1	7521 9145	404 485
## 42 #	4 1	4	7698	5.3	406	1952 1953 1954 1955	1 1 1	7360 7760 8490 7180	5.0 5.5 5.4 5.1	369 428 459 366						
44863	9 1	1	6830	4.9	336	1952	1	6830	4.9	336						
44929	2 18	23	7482	5.3	392	1955 1956 1957 1958	10 4 1	7914 6750	5.2 5.2 5.4 4.2			6/60 8290		1	7/39	434

NLW YORK

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPZO BY BREED, BY YEAR OF FRESHENING--PECOROS FROM THIS STATE ONLY

∠50

					KUS FK		STATE ONL		y cre	t br	EDI-CHEMITAIO	VEAD				
	DAUGHIER	AVERAGE	84 21	KE		К	ECURU AVE	CRAGE (3 7 2 1K	E 81	FRESHENING 305-DAY C		. AV.	YEAKLY H	ERL AVE	RAGE
SIRE O	AUGHTEKS NO.	RECOROS NO.		PCT.		FRESH YEAK	RLCOROS NO.	F8.	TEST PCT.	FAT L8.	RECOROS NO.			RECORDS NO.	MILK	
						1959	JER!		5.3	406	1	6800	358	2	9565	437
452051	1	3	10387	5.4	556	1952 1953 1955	1 1 1	10390 10080 10690	5.4 5.4 5.3	557 541 570						
454144	1	1	6080	5.2	317	1959	1	6080	5.2	317				1	10355	452
455387	46	156	7161	5+3	376	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 21 24 28 25 17 11 5 6	8139 7463 7505 7026 6805 6984 7294 7404 8081 8450	5.3 5.2 5.3 5.3 5.2 5.2 5.3 5.3 5.5	431 389 396 370 354 364 383 388 438	l 3	7950 8687	438 441	2 3	8285 8786	4462
456612	1	1	8320	5.4	453	1955		8320	5.4	453						
456947	95	228	7485	5.3	394	1952 1953 1954 1955 1956 1957 1958 1959	23 47 57 46 25 17 8 4	7514 7706 7455 7632 7556 7618 7235 7778 7480	5.3 5.4 5.3 5.2 5.3 5.3 5.3 5.3	397 413 392 395 402 404 382 410 416	1 1 2 4 3 4	66 30 71 80 73 35 75 35 86 13 87 78 9880	363 356 389 388 433 483 537	1 1 2 3 3	6496 10126 7794 7993 8985 9472	325 530 417 425 481 525
457043	120	315	8071	5.3	424	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	44 26 43 53 52 51 41 26 12 6	8290 7952 8396 8203 8076 8373 8208 8624 6370 9107 5830	5.5 5.3 5.3 5.2 5.2 5.3 5.3 5.5 5.5	445 434 445 432 420 433 430 458 352 458 333	2 1 2 1 7 4 3 1	8450 9050 8115 8940 7864 7080 7257 8600	497 496 475 477 402 380 382 452	2 4 8 6	8644 8489 7939 7728 9270	445 453 420 393 444
457095	1	3	8480	5.5	463	1953 1954 1957	1 1 1	9360 11070 5010	5.2 5.6 5.7	485 615 288						
457258	1	1	4680	5.6	262	1959	1	4680	5.6	262				1	10475	455
458159	54	90	7644	5.1	382	1954 1955 1956 1957 1958 1959	11 21 34 14 7 3	6915 8442 7292 8206 7077 7987	5.0 5.1 5.0 5.1	349 421 367 414 358 410	1 3 3 - 2	9260 9283 7383 7910	479 477 385 419	1 3 4 3	8513 8727 7897 8019	437 430 399 409
460497	184	308	7998	5.3	419	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 15 12 12 12 15 34 21 72 95	8808 8446 8139 7848 8401 7909 8311 8345 8244 7922 5649	5.6 5.4 5.1 5.2 5.1 5.2 5.3 5.3	476 458 456 424 430 411 422 432 437 298	2 7 31 52 4	/960 8496 8375 8143 7630		2 8 38 50 7	7729 8038 8887 9325 7769	413 462 451
460560	1	5	9696	4.5	434	1955 1956 1957 1958 1959	1 1 1 1	7890 9830 11380 10640 8740	4.6	386 451 491 459 384						
460676	1	1	7880	ų. 9	387	1959	1	7880	4.9	387	1	7090	394	1	7608	428
460789	3	5	9009	5.4	481	1955 1958 1959 1960	1 1 2 1	9710 9800 8325 5900	4.8 6.0	513 468 498 391	1	10060	522	1	10115 10115	
462961	1	1	7630	5.2	39b	1956	1	7630	5.2	398						
463576	3	Į.	7918	5.3	420	1958 1959	2 2	8190 7485		458 410	1 2	8850 9205	488 502	1	8415 9287	
465030	43	89	7543	5.2	392	1953 1954 1955	17 21 23	8142 7783 7752	5.2 5.4 5.3	420 418 410	. 1	7620	428	1	8785	392
						1956 1957 1958	18 8 2	7314 6355 8440		375 328 445	1 2 1	6300 6620 7310	353 404 367	2 1 2	6448 8666 7401	406 392 370
466643	5	6	7375	5.6	411	1957 1958 1959 1960	1 3 1	7540 7983 7260 5950	5.6 5.6 5.6	421 445 405 323	1	7430 7180	378 397	;	8644 7325	385 414

TABLE 15.--DAUGHTUR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY SIR	t.		н	ECURD AV	ERAGE 8	Y 51R	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	KECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NO.				SOS-DAY (RECORDS		FAT	YEARLY HE RECORUS NO.		FAT
							JEK	o t Y								
466748	98	289	7529	5.3	395	1949 1950 1951 1952	5 38 50 45	7408 7512 7440 7796		376 394 387 400	1	7080 3900	384 307			
						1953 1954 1955 1956 1957 1958 1959	40 37 30 23 14 6	7827 7854 7907 7673 7337 9078 8820	5.2 5.3 5.1 5.1	407 415 403 393 365 481 424	1 2 2 3 2 2	6840 7325 7640 7237 8005 7345	352 395 419 378 421 400	2 3 1 2	6496 7736 8273 6355	325 398 428 336
468045	9	13	7540	5.3	397	1954 1955 1956 1957	2 5 5	8320 7490 7668 6670	5.3 5.2 5.3 5.5	433 390 408 364	1	8400	386	1	6965	344
468054	1	3	7347	4.9	362	1954 1956 1957	1 1	6680 7900 7460	5.3 4.7 4.8	357 373 357						
468440	1	1	8950	4.8	427	1954	1	8950	4.6	427						
473955	7	16	7103	5.5	391	1951 1952 1953 1954 1955	4 6 2 2 2	8120 6507 6725 6820 8020	5.6 5.6 5.4 5.7 5.2	453 360 365 386 415						
474643	106	250	7093	5.5	390	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 10 30 33 54 40 31 20 12 4	5580 7108 6725 7054 6770 7317 7477 77762 8080 8015 8483	5.9 5.7 5.7 5.6 5.5 5.4 5.5 5.4 5.5	331 407 380 401 380 403 408 424 430 439	1 1 3 4 5 2 3	8640 7800 6960 9198 8348 8360 8567	479 480 395 465 417 451 449	3 2 4 5 2 2	8571 8197 9159 8114 8284 8726	448 425 470 409 443 450
475541	29	42	8668	5.3	457	1954 1955 1956 1957 1958 1959	3 6 12 8 4 9	9817 9562 8565 9105 7553 8543		525 526 453 476 395 455	1 1 3 9	8990 8990 7957 8997	460 510 421 466	1 1 4 1	9363 8927 8437 7783	479 470 433 408
475547	1	3	7693	6.3	481	1958 1959	2	7990 7100	6.3	50 1 44 1				1	8611	395
475931	ţţ	5	10510	5.7	594	1958 1959 1960	2 2 1	10970 9800 11560	5.7 5.7 5.8	618 555 667	2 2 1	9570 9360 9150	540 526 525			
477784	1	1	8390	4.8	406	1954	1	8390	4.8	406						
478650	2	2	6550	5.9	381	1957 1959	1	7110 5990	5.7 6.0	402 359	1	5900	331	1	6257	359
480287	2	2	6985	4.8	332	1958 1959	1	6450 7520	4.9	319 345	1	6290 6510		1	7990 7979	405 373
480642	2	9	8650	5.1	439	1952 1953 1954 1955 1956	2 2 2	8970 9020 9595 7515	4.7 5.1 5.5	422 461 520 382						
482585	156	375	8108	5.0	401	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 27 47 53 46 38 43 32 54 32 2	8746 8134 8224 8145 8487 7805 8119 8383 8590	5.0 5.0	436 408 410 411 421 389 390 417	1 1 7 26 23 2	74 10 8650	394 431 421 401	1 1 10 31 23 2	7826 7499 8542 8523 8409 7614	395 431 435 417
482718	26	58	6742	5.6	372	1950 1951 1952 1953 1954 1955 1956 1957 1958	2 15 12 15 6 4 2 1	6683 7782 7502 7510 8535	5.7 5.6 5.5 5.4 5.6 5.6 6.2	371 426 403 424 461						
482807	3	14	10716	5.3	554	1953 1954 1955 1956	2 3 1 3	9180		477	1	11490 7650 9550 8560	319 407	1	7085	373

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAI L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-0AY (RECORDS 40.			YEARLY H. RECOROS NO.		FAT
						1957 1958 1959	JER: 3 I I	9933 14230 16330	5.3 4.4 4.7	518 631 769	1	7430	403	1 1 1	6584 10268 10497	349 533 548
48372	7 49	80	7825	5.0	391	1954 1955 1956 1957 1958 1959	2 12 14 20 18 13	9080 8081 8354 7540 7719 7383 6560	5.1 5.0 4.8 5.1 5.1	455 413 417 362 389 377 348	1 5 6 7 1	8500 8392 8712 8369 5840	450 415 443 432 304	1 6 6 9	8513 7537 6213 8217 6464	437 370 416 376 331
48471	3 12	42	8571	5.4	459	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 3 9 6 7 8 4 2	7970 8273 9022 11300 8634 8914 6740 8890 9590	5.2 5.1 5.5 5.3 5.4 5.1 5.5 4.8	409 423 489 621 454 476 351 483 459	1	8570	455	1	10628	566
48517	0 86	183	7712	5.0	380	1951 1952 1953 1954 1955	7 28 33 45 38	6901 7445 8113 8058 8250	5.4 5.1 4.9 5.0 4.9	372 376 395 401 404	1	7650 8660 7980	38 1 468 430			
						1956 1957	23 9	7974 8939	4.9 4.7	589 416	1 2	6780 9175	356 490	1 2	7445 8835	402 479
48719	8 61	120	7706	5.3	411	1952 1953 1954 1955 1956 1957 1958 1959 1960	12 11 8 7 5 33 29	7869 8098 7544 7815 7911 7538 7514 7840 7143	5.4 5.3 5.4 5.2 5.1 5.3 5.4 5.4	428 421 398 419 409 387 397 422 392	18 20 2	7934 7622 8730	408 396 475	21 12 6	8777 8604 8820	436 420 434
48784	4 2	3	4788	5.1	244	1952 1953	1	3360 50 7 5	5.5	185 255						
48818	91	169	8110	5.1	413	1951 1952 1953 1954 1955 1956 1957 1958	2 8 10 16 15 10 37 55	7175 8461 8282 8173 9013 8208 8973 8190 7995	5.0 4.9 5.0 5.1 5.1 5.3 4.9 5.2	361 418 415 417 456 428 433 422 411	1 2 1 1 5 20	6080 8455 6580 5000 7472 8019 8105	363 454 377 274 381 422 418	2 2 6 19 34	7625 7608 7767 6210 8831	415 407 405 424 447
48829	91 3	8	8561	4.9	414	1960 1951 1952 1953 1954 1955	4 2 2 1 1 2	8363 8595 7280 9580 8950 8045	5.0 5.3 5.4 4.2 5.5 5.2	411 455 393 400 496 414	2	7165	374	3	9294	446
48900	1	2	6850	5.5	371	1952 1953	1	6390 731 0	5.4	542 399						
48984	10 I	1	6000	6.0	357	1450	1	600ú	6.0	357						
49052	9 68	118	8433	5.1	428	1952 1953 1954 1955 1956 1957 1958 1959 1960	7 6 10 10 21 21 11 28 4	8743 8443 7926 9152 7946 8606 7450 8755 8413	5.4	455 440 431 482 410 440 390 437 429	1 1 1 2 2 2 3 10 3	7870 7620 7230 8535 8310 6347 8239 8083	398 459 430 440 438 332 429 429	2 3 3 22 3	7450 7088 8259 9073 9254	379 365 375 410 452
49070	7 3	3	8737	5.2	453	1957 1958 1959	1 1 1	9150 7600 9460	4.7 5.9 5.1	431 446 483	1	8470	421	1	7728	394
49523	30 15	30	7042	5.4	380	1952 1953 1954 1955 1956 1957 1958	7 8 7 3 2 1 1	6536 7483 7087 7513 8485 8280 9250 7430	5.5 5.4 5.5 5.2 5.4 5.5 5.5	359 408 383 411 437 444 509	1	8790 8650	484 445	1	7608 9123	407 467
49598	37 1	ځ	10000	5.6	557	1952 1954 1955	1 1 1	10190 11070 8740	5.5 5.5 5.7	558 614 499						
49603	9	26	7986	5.2	414	1951 1952	1 4	8590 6635		410 362						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

6720 5.3 354

7660 5.4

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-DAY 6 RECORDS NO.			YEARLY HE RECORDS NO.	MILK	
						1960	JER:	8160	5.5	442	2	7945	422	2	7777	405
522014	3	3	8707	5.5	485	1958 1959	1 2	9660 8230	6.2	598 429	1	7 520	418	1	7129	333
522499	1	1	9800	5.3	517	1959	1	9800	5.3	5 I 7						
529078	3 1	1	6240	5.9	367	1959	1	6240	5.9	367				1	9832	398
531188	3 1	1	8710	5.5	481	1959	1	8710	5.5	481	1	7580	371			
534366	5 2	3	8255	4.9	400	1957 1959	1 2	8820 769 0	5.0	442 358	2	7690	394	2	8153	415
534376	5 11	20	6542	5.5	362	1954 1955 1956 1957 1958	1 9 5 2 3	6660 6390 6736 7700 7790	6.3 5.7 5.6 5.6 5.0	421 369 381 425 386	2	8115	410	3	7932	399
535504	42	72	7489	5.5	408	1955 1956 1957 1958 1959 1960	1 10 26 22 11 2	6830 7554 7844 7766 7922 6865	5.4 5.5 5.5 5.5 5.7 5.3	372 412 430 422 447 363	5 6 6	8248 7350 8463 8240	411 376 423 430	5 12 8 2	9555 8874 8706 9996	474 423 427 485
542908	3 8	12	7953	5.6	439	1957 1958 1959	3 5 2	8473 7028 8545	5.4 5.5 5.7	458 384 481	2 3 1	9015 7253 7750	431 381 390	2 2	885 1 770 I	467 372
						1960	2	7885	5.8	454				1	7096	362
5452 77		1	5130	5.1	260	1960		5130	5.1	260	1	8010	405		7.0.	,
546648	3 8	9	8074	5.1	414	1958 1959	4 5	8255 7746	5.3	396 414	2	7235 7548	365 387	3	7696 7212	369 365
547731	2	2	7220	5.5	400	1959 1960	1	6330 8110	5.1	323 476	1	9440	521	1	9341	511
549805	5 56	88	7758	5.3	405	1956 1957 1958 1959 1960	3 16 44 22 3	7473 7493 7922 7990 7257	5.2 5.1 5.2 5.3 5.0	382 385 409 419 361	1 5 24 14 2	6530 8688 8118 8516 6285	352 446 421 429 322	1 7 28 12 3	8110 8876 8406 8359 7383	407 454 433 413 376
550722	2 1	1	9340	5.5	516	1958	1	9340	5.5	516						
553507	3	ł.	9288	4.9	451	1957 1958 1959 1960] 1 1	8510 11440 10590 8340	4.9 4.7 4.9 4.9	415 537 519 411	1	5420	275	1	6344	3∠4
55429	1 1	3	10003	5.2	518	1958	3	10003	5.2	518	1	8440	450	2	8328	441
554822	2 19	33	8165	5.5	450	1957 1958 1959 1960	4 16 12 1	6858 8822 8185 6570	5.4 5.7 5.6 6.0	367 498 459 393	3 8 11 1	8470 8066 8118 10480	405 430 423 547	3 11 11	7205 8379 8300	362 439 430
554842	2 1	1	9120	5.4	491	1959	1	9120	5.4	491	1	9570	502	1	9145	485
55631	1 1	2	7640	5.5	421	1958	2	7640	5.5	421	1	7100	377	1	6453	320
557267	7	8	6579	5.2	338	1958 1959 1960	1 5 2	4880 8148 4665	5.9 5.1 5.0	287 413 228	3 I	7510 2740	383 126	2 2	8159 10563	426 495
557268	8 14	16	5958	5.5	327	1958 1959 1960	4 7 5	5660 6289 5472	6.0 5.5 5.3	334 345 290	3 6 4	7767 6948 5350	392 346 267	3 5 3	7870 7695 7481	409 372 387
557328	9 2	4	8055	5.4	433	1958 1959	2	7200 8910	5.4 5.4	389 477	1	8250 9570	457 506	1 2	8971 9309	491 489
56148	7 2	د	7520	5.7	431	1958 1959	2	7760 7280	5.9 5.5	461 401	i 1	6510 6710	355 352	2	7238 6791	377 353
56 14 88	3 1	1	4010	5.3	210	1959	1	4010	5.3	210	1	8660	386			
563414	4 13	16	7583	5.3	401	1958 1959	5 11	7042 8031	5.6 5.4	399 42 7	1 4	8540 8165	437 408	2	8557 10385	433 461
563658	8 54	74	7335	5.6	411	1958 1959 1960	15 55 6	8157 7474 6460	5.4 5.7 5.5	442 424 346	6 42 2	7847 8025 8550	414 418 440	9 32 6	8306 8570 10501	404 456 476
563945	5 19	∠0	8 107	4.8	391	1959 1960	16	8092 7 990	4.8	390 395	15 4	7566 7670	390 400	12	8791 7877	42 I 40 I
565429	9 2	5	87/3	4.6	397	1958 1959	3 2	7317 8815	4.9	357 408	1 2	3060 7620	437 520	2 2	9156 10012	486 540

TABLE 15.--- OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY C RECURDS NO.	ONTLMP MIEK LB.	FAT	YLARLY HE RECORDS NO.	RD AVE MILK LB.	FAT
							JER S	LY								
56819	4 16	16	7406	5 · I	374	1959 1960	15 I	7569 4970		385 220	11	9295	481	10	9389 8 99 3	480 397
568229	9 3	3	5593	5.2	292	1959 1960	2	5615 5550		307 262	1	7630	408			

TABLE 15.--DAUGHTER-AVENAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NU.	OAUGHTEKS	KECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.	L8.			SOS-DAY (RECORDS NO.		FAI	YEARLY HE RECORDS NO.		FAT
777/10	, ,	2	01.1.6). I	21.0	1948	BRUWN:	8060	b. 0	174						
37398	3 1	2	8443	4.1	340	1953	i	8830	3.9	336 344						
38049) 48	80	8772	4.2	366	1952 1953 1954 1955 1956 1957 1958 1959	5 18 13 18 10 9 5	8660 9131 9221 8952 7927 8974 10426 10210	4.2 4.3 4.2 4.3 4.1	347 379 386 303 336 390 457 442	!	9160 10870			9058 10769	
39593	3 2	9	11403	ią " lą	493	1950 1951 1952 1953 1954 1955	1 1 1 2 2 1	7910 11480 11800 11355 11365 10850 12440	4.4 4.2 4.2 4.3	356 507 501 471 489 489 533						
4541	7 1	1	4440	3.9	173	1956	1	4440	3.9	173						
48098	3 1	3	10427	4.0	412	1958 1959	2	9740 11800	4.0 3.9	388 460				2	9723 12502	
48672	2 1	1	12 100	3.8	463	1958	1	12100	3. ₺	463						
50092	2 24	53	9517	4.0	382	1952 1953 1954 1955 1956 1957 1958 1959	11 13	10434 9487 9558 10283 8921 9644 10470 10585	3.9 4.0 3.9 4.1 4.1	392 370 384 394 373 395 392 367		10520	427	1	10867	441
51890	0 10	22	11728	3.8	448	1953	1	12100	3.8	463	-					
						1954 1955 1956 1957 1958 1959	3	9230 11240 10887 9940 10308 13795	3.6 3.8 3.9	339 428 423 341 364 539	2	9710 11010 12540 13320 11125	413 478 543 541 450	1 1 1 5 4	10235 10649 10551 12104 11625	433 433 440 480 444
57991	4 2	2	9 1 2 5	4 - 1	373	1951	2	9125	4.1	373						
58918	B 2	3	9658	4 * 4	419	1952 1953	2	9660 11930	4.5 4.4	413 520						
5969	9 4	9	11444	4.2	485	1957 1958 1959	1 5 3	8760 10996 12187	4.1	316 449 529	1	12840 12730			12484 12742	
5981	1 59	120	9801	4.2	414	1952 1953 1954 1955 1956 1957 1958 1959 1960	5 22 23 18 17 15 12 7	9362 9850 9089 10339 9425 10069 10322 11343 15890	4.3 4.0 4.2 4.2 4.3 4.1	404 419 393 419 399 428 438 469 645	1 2 4 3	9650 10065 9933 12137	411 401 399 503	1 2 6 1	10769 9767 12005 12132	426 398 485 518
6156	4 1	1	10510	4-4	467	1953	1	10510	4.4	467						
6156	7 1	1	4750	5.0	239	1956	1	4750	5.0	239						
6257	3 12	28	10815	4.1	441	1952 1953 1954 1955 1956 1957 1958 1959	1 2 7 6 3 1 5 2	9250 10765 9653 12052 12973 11500 11242 13405 1340	4.4 4.2 4.1 4.2 3.7 4.0 3.8	403 471 406 494 546 430 456 513		11490 3760			13680 13494	
6283	4 3	10	11307	4.2	466	1954 1955 1956 1957 1958 1959	1 2 1 2 3	11450 10810 11950 10170 11227 14400	4.0 4.2 4.2	448 443 479 419 471 590	1	12250 9410	513 376	2	1 1837 11870	487 486
6454	1 2	4	12355	4.5	555	1959 1960	3 1	11947 13580		531	3	11610	483		11227 11816	475 482
6477	3 6	13	10210	4.3	434	1954 1955 1956 1957 1959	3 3 2 2	9097 11113 11060 12265 10407	4.5 4.3 4.5 4.2	410 480 504 511 428	3 2 2 2 3	9580 9970 12160 11000 10055 10683	369 416 485 455 380 428	3 2 2 2	9116 10649 10551 10682	377 433 440

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

					103 16		STATE UNI									
	OAUGHTER	AVERAGE	BY SI	RL		R	ECORD AV	ERAGE 1	BY SIR	E BY	FRESHENING					
SIRE NO.	DAUGHTERS NO.	RECORDS NO.	MILK L8.	TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PC1.		305-DAY RLCUROS NO.	CONTEMP MILK Lb.	FAT	RECOROS NO.	MIEK	FAT LE.
							BROWN	SWISS								
6483	7 12	21	10555	4.2	435	1954 1957 1958 1959	8	7990 10970 12118 10387	4.2	436			482 498 414	В	11968 12009 11274	486 485 464
6342	1 5	14	11020	3.9	429	1953 1954 1955 1956 1957 1958	1	9960 9737 11923 13290 11597 9430	3.9 3.9	375 358 447 512 456 361						
68354	4 125	220	9958	4.2	418	1953 1954 1955 1956 1957 1958 1959 1960	2 11 34 31 32 54 50 6	9622 10804 10219	4.2 4.1 4.3 4.2 4.2	515 419 423 414 404 457 428 414	1 3 3 2 2 20 37 5	8310 13040 9447 9630 11389 10497 9132	54 I 4 I 4 4 0 9	2 2 4 24 34 5	10748 9969 9857 11628 10975 10748	438 343 394 484 448 446
6835	5 19	47	108/3	4.2	452	1954 1955 1956 1957 1958 1959 1960	7 10 13 9 4 3	10880 10700 11385 10894 11688 11560 11060	4.3 4.1 4.3	450 456 469 468 464 472 466				1	14944 11358	
6B74	1 7	15	10444	3.9	400	1953 1954 1955 1956 1957 1958 1959	2 3 1 4 3	7970 13477 12300 10903 11337 15530	3.7 3.6 3.9	310 493 438 421 437 588 413	1 1	7510 7500	284 286 503	1	80B8 8099	311
69048	3 1	5	13206	4.1	544	1954 1956 1957 1958 1960	1 1 1 1	14810 14040 12250 11510 13420	3.9 4.2 4.3	582 587 523 456 572	·				11194	
69978	3 2	3	7223	4.4	316	1956 1957	1 2	5570 7830	4.1 4.5	230 355						
70012	2 3	4	10725	3.9	421	1956 1957 1959	2 1 1	11725 10990 8940	4.1 4.4 3.6	474 479 322	1	11690	445 379	1	9557 8469	343 349
70410	2	2	8800	3.8	332	1958 1959	1	8730 8870	3.0	333 331	1	8170 9620	344 350	1	8480	348
7074	7 4	14	10753	4.1	440	1955 1956 1957 1958 1959	1 3 3 4 3	7360 10777 10730 10580 10320	4.1 3.8 4.4 4.1 4.2	301 412 470 437 434	1 2				11521 10519	
71920) 1	2	5525	4.0	219	1953 1955	1	5830 5220	3.9 4.0	227 210						
72391	3	3	10660	4.2	433	1956 1959 1960	1 1 1	6530 13040 12410		305 529 465	1	11420 8340	459 349		10693 9734	
73318	3	6	10017	4.0	402	1955 1956 1957	3 2 1	10090 9730 10370	3.9	409 382 416						
74062	2 60	96	10359	4.1	425	1955 1956 1957 1958 1959 1960	6 16 23 31 16 4	10668 9700 10254 11080 11088 8723	4.1 4.0 4.1	453 408 417 447 450 345	5	10040 10722 10917 10590 10950	429 444 441	2 5 14 14 2	11336 10242 11450 11107 12235	443 404 460 456 482
76059	9 12	19	9899	4.3	413	1953 1954 1955 1956 1957 1958 1959	2 4 4 2 3 1 3	10115 9900 11965 8435 8873 10670 10633	4.1 4.4 4.5 4.1	431 421 472 372 402 435 432	l 3	11920 11103		1 3	9865 11053	
7613	5 35	82	9676	3.9	384	1953 1954 1955 1956 1957	8 17 15 20 9	8356 9918 9350	4.2 4.0 3.9 4.1	351 392 367 409 394	1 2 1 5 3	12170 11710 9800 11554 10060	510 487 448	1 4 2	11859 11143 12258	461 444

TABLE 15.--DAUCHTER-AVERAGE DE SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS ND.	RECORDS NO.			FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY RECOROS ND.	MILK		YEARLY HE RECORDS NO.		FAI
						1958 1959	5	11448	4.0	434 428	5 2	10884 10790	440 457	£6 £4	11009	453 449
						1960	2	10530	3.8	394	1	10590	415	1	12372	450
76202	2 139	226	10315	4.3	446	1954 1955 1956 1957 1958 1959 1960	5 21 26 36 62 59	8570 10030 9350 10250 11025 10822 12064	4.3 4.3 4.2 4.4	357 428 400 433 487 469 516	1 4 10 23 41	10730 11373 10883 10142 11441 11037 11033	464 486 439 412 467 458 444	4 5 9 28 46 16	11411	370 459
77319	9 2	2	13815	4.2	572	1959	2	13815	4.2	572	2	10725	435	2	11140	456
7777	, 4	7	11868	4-1	482	1958 1959	6 1	12180 13640		493 484	1	13300	529	2	10753 13200	414 480
78152	2 4	7	12954	4.0	514	1955 1956 1957 1958 1959 1960	1 1 1 2 1	11480 11090 11720 15420 12785 14210	3.9 3.8 4.2 4.0	441 428 441 641 509 558	1 1 2 1	10900 10420 13630 15260 10840 13100	447 439 559 637 444 545	1 1 2 1	9625 11292 10715 13734 11347 13091	421 477 441 573 459 534
79581	2	4	10409	4.3	448	1958 1959	2 2	11320 10365		479 436	1 2	11630 11260	468 457	2 2	10290 11004	428 449
8240	5 18	30	11698	4.2	492	1957 1958 1959 1960	9 9 9 3	10444 12591 12577 14800	4.2 4.2 4.2 4.2	438 531 529 628	4 3 8 1	9775 10690 11331 10260	435 452 470 458	կ 5 5 3	11532 11081 10283 10649	479 468 423 458
8246	2 5	5	8668	4.1	357	1959 1960	2 3	6875 9863	4.2 4.0	302 394	2	11365 12160	436 461	2 3	10410 11318	408 436
8251	3 1	1	9440	4.2	396	1952	1	9440	4.2	396						
8258	5 1	1	11960	4.2	498	1956	1	11960	4.2	498						
8362	5 1	2	10195	4.1	414	1959 1960	1	11390 9000	4.∠ 3.9	478 350	1	11080 12040	446 460	1	10987	444
8405	2 1	1	17440	4.1	715	1959	1	17440	4.1	715	1	12280	529	1	11968	509
8465	0 1	1	14200	4.4	629	1953	1	14200	4.4	629						
8496	3 1	2	11240	4.3	479	1955 1957	1	11180 11300	4.3	478 479						
8613	7 1	1	16390	4.3	711	1959	1	16390	4.3	711	1	12320	522	1	11707	500
86139	9	21	10670	4 • 2	437	1952 1953 1954 1955 1956 1957 1958	1 2 5 4 1 2 3	10050 8845 9928 9735 8050 13490 12473	4.6 4.4 4.1	452 402 435 394 338 534 482	2	11935	480	3	11144	460
						1959	3	10823	4.3	459	3	11333	462	3	12262	501
8713	8 1	1	11230	4.2	473	1957	1	11230	4.2	473						
8763	0 2	3	11410	4.3	491	1955 1957 1958	1 1	12650 13210 9890	4.1	548 547 434	1	10100	451	1	11532	479
8767	7 59	121	9282	4.1	383	1952 1953 1954 1955 1956 1957	5 14 16 16 12		4.3	417 426 420 396 374 328	1 2 1	10040 9015 9980 9040	456 427 419	1	8982 9265	374 377
						1958 1959 1960	22 22 5	9353 9427		382 395 331	9 13 2	10260 11219 11180	420 489 425	11 14 3	9843 10947 11093	405 453
8768	1 2	2	6975	4.0	277	1959 1960	1	10660 3290		425 128	1	11770	487	1	11303 13527	455 506
8845	5 6	9	10895	4.1	448	1952 1953 1954 1955 1956 1957 1958 1959	1 2 1 1 1 1	8390 9880 10810 10310 11420 10460 12780 14990	4.0 4.7 4.4 4.1 4.4 3.8	362 394 506 450 466 459 492 579	1	11400	498	1	10704	440
8894	0 1	1	15390	3.8	584	1959	1	15390	3.8	584	1	15270	640	1	13603	567
8961	2 3	8	12223	4.3	520	1953 19 54	2 2	12675 13130		525 534						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVLKAGL	BY SIR	RL		к	ECURD AV	LRAGE E	3Y 51K	£ BY	FRESHENING	YLAR				
SIRE NO.	DAUGHTERS	KECURDS NO.		TLST PCT.	FAT LB.	FRESH YEAR	RECORDS		TEST PCT.		SOS-DAY (RECORDS NO.	MILK		YEAKLY HI RECORDS NO.		FAT
						1955 1956 1957 1958	BROWN I I I	SW15S 16370 10940 12630 12750	3.9 4.1 3.8 4.5	643 445 481 569						
91234	4 13	22	11388	4.0	452	1956 1957 1958 1959 1960	3 4 6 8 1	9640 11718 13338 11951 10540	4.5 4.3 3.9 3.9 3.9	433 495 512 455 415	1 1 2 6 1	11430 13590 12250 11920 8780	404 518 470 513 372	1 1 4 7 1	12535 9091 12383 12336 10965	473 347 472 491 440
91856	5 1	1	12870	4.5	581	1959	1	12870	4.5	581	1	12790	516			
9377	1 100	140	10577	4.3	454	1956 1957 1958 1959 1960	3 14 47 65 11	11127 10341 10332 10723 12205		436 445 451 462 516	1 18 47 6	9210 11374 10775 11068	340 474 456 426	1 18 45 11	10420 1209? 11286 12204	423 504 459 497
94392	2 75	128	10138	4.3	437	1953 1954 1955 1956 1957 1958 1959	2 9 13 28 21 28 21	11205 10414 10419 9930 10520 11571 10218	4.1 4.4 4.3 4.4 4.3 4.4	463 457 451 431 450 508 448	1 3 2 3 11 20	12380 11180 13300 12767 11107 10893	545 490 585 555 462 457	3 3 4 15 16	10446 12303 12203 11092 11489	427 500 501 465 484
						1960	6	12243	4.2	509	łą	10470	450	5	11057	458
94606	6	13	13666	4.0	5 38	1957 1958 1959	1 7 5	13040 13203 12806	4.3 4.0 3.9	555 532 504	1 14 14	13840 12250 11333	529 497 461	1 6 4	12840 11819 11802	500 478 480
94665	5 71	132	9468	4.2	418	1953 1954 1955 1956 1957 1958 1959 1960	2 17 28 23 13 25 19	12535 9261 9899 8448 10647 12529 10665 9946	3.9 4.1 4.2 4.2 4.1 4.1 4.1	480 383 415 308 440 513 435 407	1 1 8 13 2	8870 12770 11406 11585 10215	367 552 465 469 425	1 10 14 1	12917 11332 11665 10410	554 463 476 424
9044	1	1	9180	4 - 1	380	1959	1	9180	4.1	380	1	11520	466	1	10693	454
99438	3 5	8	12011	4 - 4	505	1957 1959 1960	2	8555 B135	4.1	388 329	1	9090	383	2	10846	448
100513	3 5	10	11072	4+1	453	1956 1957 1958 1959 1960	1 2 4 2	13160 12565 12868 12245 8550	4.3	523 490 519 516 346	2 2 1 1	13995 11580 12110 8130	528 441 532 327	2 3 2 1	10966 10816 12928 8164	424 428 488 339
100544	4 15	26	B511	4.3	364	1955 1956 1957 1958 1959 1960	7 7 7 3 1	8429 9447 9116 7563 9320 7760	4.3	359 411 392 347 418 336	1 2 1 1	7190 8825 10140 12650 12370 9850	287 372 401 552 525 413	1 1 1 2 1	7467 8175 8349 10791 11761	306 337 340 470 505
101316	5 1	1	10600	4.3	453	1956	1	10600	4.3	453						
102187	7 1	1	9510	4.4	414	1959	1	9510	4.4	4 14	1	12550	532	1	11707	500
103408		3	11150	4.5	504	1958	3	10617		483	2	12265	52 I	2	11096	472
105570) 19	36	11280	4.2	476	1956 1957 1958 1959 1960	1.7	9317 10676 12079 11274 14005	4.3 4.1 4.1	503 465	4 1	11780 11848 10380 11005	489 419	13	10112 11793 11911 11107	470 454
106313	3 1	1	11480	4.5	515	1959	1	114B0	4.5	515	1	12566	538	1	11587	495
106791		ł.	7293 12990	4.6		1956 1957 1958	2 2	6785 7800		534	1	9770 9770	391 401 380	1	12306	han
						1959 1960	1	15900 10110	4.5	664 453	1	12500 10530	533 463	1	1172B 10573	502 451
108905	5 3	6	10653	4 - 1	441	1958 1959	5	11226 12720				13205 13210			14148 13004	537
113180	0 1	1	13220	4.2	552	1959	1	13220	4.2	552	1	12610	539	1	11707	500
11359	4 93	154	9601	4.1	397	1956 1957 1958 1959 1960	13 64 5> 18	8792 10092 10702		361 415 450		8780 10373 11284 7976	468	1 34 41 15	10279 10296 11659 11053	425 474
11712			14830			1959	1		4.3							
12022	6 2	3	12883	3.9	505	1959 1960	2	13155 7790	4. ს 3. ს	519 298	1	11660 10730	499 431	2 1	11783 10824	447 453
12044	B 30	40	12681	4.1	519	1958	5	14840	3. მ	5/2	2	13255	584	žį.	12432	5 35

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

RECORD AVERAGE BY SIRE BY FRESHENING YEAR OAUGHTER AVERAGE BY SIRE SOS-DAY CONTEMP. AV. YEARLY HERO AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LB. LB. NO. LB. Lb. SIRE DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. 8ROWN SWISS 29 12362 4.1 507 6 14177 4.2 590 1959 21 11194 474 5 11428 477 21 11832 485 5 11445 478 1960 9548 4.5 10911 4.3 9381 4.0 12165 508 11337 480 7840 317 1958 423 465 381 122766 37 41 10308 4.3 438 12039 506 24 11861 480 11731 479 1959 1960 8 9573 4.0 381 1959 2 6600 4.1 6 10563 4.0 264 420 1 8660 344 3 11013 435 9309 383 124609 8 1960 1 120/0 553 125091 1 1 11040 4.1 453 1959 1 11040 4.1 453

TABLE I .--DAUGHTER-AVERAVE OF SIKES IN SCRVICE IN ARTIFICIAL BREED NG ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

1959

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERO AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LB. LB. NO. LB. LÚ. SIRE DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. FRESH KECURUS MILK TEST FAT YEAR NO. LB. PCT. LB. M. SHORTHORN 17915 1 9620 3.9 377 9620 3.9 377 1 1958 7420 3.7 273 6217 3.8 237 8110 4.1 333 1957 27712 7 7 7003 3.8 266 1958 1959 2 6600 255 1 6440 254 I 6278 247 I 6649 253 1 9370 4.1 6100 4.7 6520 3.9 1957 1958 377 45443 3 4 8057 4.1 326 286 I 6440 256 1959 254 1 6649 253 121506 2 2 7260 4.0 286 5480 4.2 232 9040 3.7 339 1958

1 10670 368 1 11129 380

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN A TIFFICIAL BRUEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

					ROS F		STATE ON		n v	£ 834	ANGENERAL MEAN
	OAUGHTER	AVERAGE	BA 211	₹E		К	ECORO AVI	RAGE	BY SIR	E BY	FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERO AVERAGE
SIRE NO.	DADGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	
							GUERI	NSEY			
174644	4 43	136	7462	5.0	370	1947 1948 1949 1950 1951 1952 1953	100 13 11 7 1 2 1	7584 7852 7825 6946 8990 8680 9020 7300	4.8 4.8 5.1 4.8	379 379 374 335 456 418 410 326	
192478	3 11	19	7802	4.8	372	1947 1948 1950 1954 1955	15 1 1 1 1	7958 8560 9640 9130 8570	4.7 4.6 4.6	381 402 448 425 363	
210621	1 8	15	6947	5.2	357	1947 1948 1949 1952	11 2 1	6501 8295 6720 10390	5.5	340 415 373 511	
213554	4 26	82	8313	4.8	396	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	1 15 12 16 12 5 3 4 5 3 3 2	6730 7751 7587 7870 7672 7958 9180 9040 9718 9487 9433 9395	5.0 5.0 4.9 4.8 5.1 4.8 5.2 4.6 4.4 4.1	301 387 375 380 363 396 444 466 453 414 386 406 592	i 8510 330 1 11470 482 1 10072 436 1 9600 330 1 10192 463 1 10235 453 1 7548 426
215116	5 3	9	7691	5.0	384	1949 1954 1955 1956 1957 1958 1959 1960	2 1 1 1 1 1 1	6745 9460 9700 10070 10000 9710 9630 8520	5.3 5.0 5.0 4.9 5.1 4.7	337 499 482 505 487 492 455 431	1 9287 444
218621	1 19	33	7626	4.5	340	1947 1948 1949 1950 1951 1952 1953	18 1 4 1 3 2 3	7675 6830 7613 6750 10450 7745 7663 9640	4.6 4.4 4.3 4.3	349 277 351 297 456 332 349 462	
219604	4 22	40	8692	4.7	408	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	21 5 2 2 1 1 3 1 1 2	8196 7782 9400 10100 12140 8360 10313 10670 7650 10075	4.7 5.1 4.6 4.1 4.3 4.4 4.2 4.4	369 470 464 497 357 456 453 337 487 764	
223291	4 2	ų	6945	4.9	338	1947 1949	3 1	6907 9210		334 426	
22610	5 8	14	6779	4.7	318	1947	14	6767	4.7	315	
22649	7 1	1	8190	4.7	388	1952	ì	8190	4.7	388	
22971	1 47	149	7497	4.8	361	1947 1948 1949 1950 1951 1952 1953 1954 1955	83 18 13 16 9 4 2 2 1	7166 7434 7547 7483 8349 9173 7025 7280 6580 7150	4.7 4.8 4.8 4.7 4.9 4.0	347 349 354 356 404 432 341 335 320 337	
23436	0 4	6	6319	5.2	320	1947 1949	5 1	6660 8510		335 429	
23738.	3 2	9	9828	4.9	478	1949 1950 1951 1952 1954 1955	1 1 1 2 1	8590 7740 9930 9120 11290 9675 10610	5.2 5.1 4.9 5.3 4.9	414 406 509 445 600 478 498	

TABLE 15.--DAUGHTEK-AYÉKAGE OF SIRES IN SLRVICL IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRL

	UAUGHILK	AVERAGE	84 211	K L		K	ELUKU AV	LKAGE	DI ZIK	EUT	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	KECOKUS NO.	MILK L8.	TEST PCT.	FAT L8.	SOS-DAY (RECORDS NO.	ONTEMP MILK L8.	FAT	YEARLY H KECURUS NO.	ERU AVE MILK LB.	FAT
						1958	GUER	NSEY 10570	4.5	477						
24 38 70) 1	2	7115	5+3	377	1952 1953	1	7360 6870		389 365						
244132	2 2	7	9749	4.2	408	1947 1948 1949 1950 1951		9720 10550 10250 8760 11220	3.9 4.2 3.7	411 412 432 324 385						
245488	3 7	14	8602	4.6	397	1947 1948 1949 1950 1951 1953 1956	3 2 2 3 2 1	8697 7076 9105 8127 8170 8590 10190	4.5 4.4 5.0 4.6 5.3	391 325 401 407 373 456 435						
247725) 1	1	8450	4.2	357	1947	1	8450	4.2	357						
25255	8	14	10124	4.4	43/	1947 1948 1950 1951	10 1 1 2	8460	4.4 4.9 4.0 4.3	436 337						
253178	3 52	114	B036	4.9	391	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	5 3 20 19 18 12 8 11 8 11	8137 7530 8121 7971 8824 8800 7889 8748	4.8 4.9 4.8 4.7 4.8 4.6 5.0 4.9	371 359 393 378 414						
253414	. 1	1	9330	4.4	434	1958	1	9330	4.4	414	1	9120	464	1	8764	431
2585 6 6	0 6	23	8132	4.7	379	1949 1950 1951 1952 1953 1954 1955	2 4 2 5 4 3 2 1	7658 7475 7198 8145 8000 8120	4.6 4.6	378 375 346 333 377 348 384 578						
25878	1 25	58	8565	ri * ri	376	1947 1948 1949 1950 1951 1952 1953 1954		8015 8336 9770 9550 11133 11300 9370 9360 10790	4.5 4.4 4.2 4.5	357 378 439 439 496 479 415 382 447						
259542	2 1	2	5540	4.8	262	1947	2	5540	4.8	262						
261884	4 29	69	8377	4.6	387	1951 1952 1953 1954 1955 1956 1957	9 11 12 16 6 8 5	8872 8865 8795 9810 10604	4.5 4.5 4.6	344 404 398 404 451 477	3	10630 10370 9545 9460 9393 9620 9220	479 451 436 418 401	1	9221 9516 9080	449
26196	6 1	3	9127	4.8	442	1953 1954 1955	1 1 1	7920	4.7 4.7 4.9	370						
26238	4 5	14	9359	4.6	428	1947 1948 1949 1950 1951 1952	1 2	10500	4.7	477 564 516						
26248	5 6	16	7761	4.9	378	1948 1949 1950 1951 1953 1954 1955	1 7 3 1 1	7393 8410 5970 7380 9100	4.0 4.8 5.0 4.2 4.1 4.2 4.3	358 420 252 300 382						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER	AVERAGE	8Y	SIRE
----------	---------	----	------

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT	305-DAY (RECORDS NO.	MILK MILK Lu-	FAT	YEARLY HI RECORDS NO.	ERO AVE MILK LB.	EAT
						1957	GUERN I	SEY 9290	4.5	419						
26293	9 1	1	5210	4.9	257	1947	1	5210	4.9	257						
26315	1 2	6	7484	5.3	390	1951 1952 1953 1954	i 2 2 1	6520 7675 7195 8300	5.5 4.9 5.5 5.3	356 376 393 438						
26556	1 8	17	7575	4.8	357	1947 1948 1949 1950 1951 1952	8 1 2 2 2 1	7633 7580 7165 7425 5700 7740 6790	4.9 4.3 5.0 5.2 5.2 5.2 5.3	363 329 359 386 298 410 356						
26753	2 2	14	7153	5.1	363	1947 1948	3 1	6970 7700	5.1 4.9	357 379						
26777.	3 3	8	6412	4.9	311	1947 1948 1949 1950 1951 1952	2 1 1 1 1 1	6375 7370 5090 6800 6430 6360 6860	4.9 4.8 4.7 4.6 4.8 4.7	513 554 248 318 294 306 320						
26946	2 9	24	7 588	4.9	369	1947 1948 1949 1950 1952 1954	3 7 5 4 1 2	7227 7522 7982 8215 9570 8160	4.8 4.9 4.9 4.9 4.5	348 365 392 403 427 388						
27333	1 1	2	6825	4.6	317	1956 1957	1	7080 6570	4.6 4.6	3∠8 305						
27412	7 22	68	9262	4.6	424	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	7 4 11 10 8 10 6 4 2 3 2	9881 8923 9717 9861 10079 9137 9572 8883 9245 9633 11465 9940	4.7 4.6 4.5 4.6 4.5 4.6 4.5 4.6 4.8 4.3 3.0	466 415 450 444 459 409 455 406 437 418 497 360						
27503	6 14	22	9277	4.8	446	1952 1953 1954 1955 1956 1957 1958 1959	3 3 5 3 1 2 2	7447 7797 9932 9703 8907 9120 12880 8945	4.8 4.8 4.8 4.7 4.2 4.8	353 346 477 460 418 386 618 433	1 1 2	9680 11980 10170	511 637 465	2	905 8	429
27506	1 10	25	8113	5.0	403	1947 1948 1949 1950 1951 1952 1954	7 4 6 4 1 1 1	7339 7858 8443 8760 9220 8600 9460 8690	5.2 5.1 4.7 5.1 4.2 4.3 4.0 4.8	378 395 398 443 388 367 376 414	i	10350	488	1	8884	458
27596	9 20	51	8623	14 ₀ 24	373	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	5	8275 9922 9873 8422 10757 9010 10427 12455 10580 6690 8780	4.5 4.4 4.2 4.4 4.0 4.3 4.1 3.8 4.5	364 429 408 367 460 355 440 509 397 300 368						
27677	2 12	26	9176	4.2	387	1951 1952 1953 1954 1956 1957 1958 1959	2 5 8 4 1 1	9743	4.2 4.1 4.2 4.3 4.4 4.2 4.1	401 367 381 420 391 460 362 350	ì	7590	351			
27769	4 21	68	8325	4.9	405	1947 1948 1949 1950 1951 1952 1953 1954	24 10 8 9 6 5	8072 8046 8971 8649 10260 9046 8393 7780		387 391 434 419 492 449 437 416						

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORDANIZATIONS--GROUPED BY DREED,
BY YEAR OF PRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRC NO.	DAUGHTERS NO.	REJURDS NO.		TEST PCT.		FRESH YEAR	RECORDS		TEST PCT.	FAT Ld.	SOS-DAY (RECORDS		FAT	YLAKLY HE RECORDS NO.		F .T
						1958	GULRN I	8240	4.3	355						
2 7 9459	20	53	8701	4.8	419	1952 1953 1954 1955 1956 1957 1958 1959	1 12 9 8 11 5 6	9080 8928 9379 7909 9477 9134 8287	5.4 4.0 4.0 4.0 4.0 4.0	491 427 446 385 455 418 371 431	5 4 2 4 2 4	9424 9745 8610 8783 10540 9275 8350	449 466 427 460 515 438 596	2 3 1 4	8382 8393 8382 9047 8813	407 414 410 432 415
281733	3 1	3	0د77	4.8	365	1947	ŝ	7730	4.8	365						
28∠352	2 10	23	8615	4.9	41 ?	1949 1950 1951 1952 1953 1954 1955	3 6 4 2 3 2 2 1	8557 8010 8205 9900 9140 9585 8570 9360	5.3 5.6 5.1 4.7 4.7 4.7 4.7	451 389 416 464 427 452 404 430						
282759	9 47	111	7779	4.9	376	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	23 20 21 10 8 7 5 6 4 5	7694 7330 8061 8546 8411 8054 8840 8237 8080 8125 7645	5.0 4.9 4.9 4.5 4.5 4.9 5.0 5.0	380 356 393 417 390 361 426 403 400 402 330						
283047	7 1	2	9620	o.c	480	1952 1954	1	9600 9640	5.2 4.8	500 459						
283109	9 182	412	7862	5•2	408	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 21 43 70 94 71 56 34 10 2	8190 7808 7386 7986 7909 7892 6528 8555 9222	5.1 5.2 5.4 5.2 5.3 5.2 5.1 5.2 4.7	423 406 395 416 417 411 443 434 478 530	5 4 6 9	7960 8462 9005 10192 9726 9583 10860	400 421 447 483 442 458 504	5 3 3 8 3	8315 8655 8967 9662 7323 11478	398 476 440 444 421 455
283808	3 1	2	8990	4.4	394	1954	I 1	8990	4.3	387						
283865	5 3	10	8583	4.5	386	1956 1950 1951 1952 1753 1954	1 3 2	8990 8435 8080 8377 7800 9570	4.8 5.0 4.3 4.4	404 469 365 339 385						
283950) 1	5	9476	4.0	384	1955 1949 1950 1951 1953	1 1 1 1 2	8970 10510 9510 8870 9295	4.0 4.1 4.1 4.0	373 423 386 366 374						
28731	1 3	6	7748	4-8	374	1951 1952 1954 1955	1 1 3 1	9840 7000 8223 6640	4.9 4.9 4.8 4.4	484 343 389 295						
287967	7 1	2	7175	5.1	360	1951 1952	1	7420 6930	4.9 5.2	360 360						
288158	В	3	10613	4.9	518	1953 1954 1958) 1 1	11940 13370 6530	5.0 4.0 5.0	595 635 325						
288923	3 4	9	7864	5.0	386	1952 1953 1954 1955 1958	3 2 1 1 2	8447 7555 9330 10050 6160	4.9 5.3 4.6 4.7 4.7	411 399 432 473 287	1	6530	408	ı	9047	432
28916	4 1	1	8070	5.3	430	1955	1	8070	5.3	430						
28986	3 4	11	9076	4.9	442	1949 1950 1951 1952 1953 1954	2 1 3 2 2 1	9355 9750 8840 8515 10135 9490	5.2 5.1 4.7 5.1 4.9	486 493 419 431 499 425						
290573	2 12	30	8315	4.6	379	1947 1948 1949 1950 1951 1952	ц 5 ц 3 3	7310 9538 8910 7877 9133 8390	4.8 4.5 4.7 5.1 4.8 4.6	353 405 419 404 431 380						

NEW JEKSEY

TABLE 15.-- OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YLAK OF FRESHENING--RECORDS FROM THIS STATE ONLY

	BY YLAK DAUGHTER				IROS FH		STATE ON		V C10	cov	LONGHENTN:	V. A.				
	DAUGHIER	AVERAGE	DT 51	KE		K	ELUKU AVI	CKAGE E	T SIK	EUY	FRESHENING		. Av.	YLAKLY H	ERU AJI	RASi
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAK	RECOROS NO.	LB.	TEST PCT.				FAI	KLCOKUS NO.	MIER	
						1953 1954 1955 1956	GUER! 2 1 2 2	9125 7350 10900 8355	4.6 5.7 4.6 4.4	407 416 491 352						
293593	3 29	68	8917	4.7	419	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 8 10 8 9 9 3 4 4 2	8265 8354 8500 8456 8779 8887 8740 9015 8845 9758 9730 8740	4.9 4.7 4.8 4.4 4.7 4.7 4.7 4.9 4.0 4.3	403 393 401 399 390 417 410 448 407 474 438 379	1 2 1 1 2 1	8630 8830 8940 9155 10750	436 438 373	1 2	7 107 8846	313 372
294214	51	148	8700	4.8	419	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 8 15 25 74 18 18 14 10 7 5	8570 8115 8634 8219 7909 10251 8960 8925 9570 8354 9894	5.0 4.6 4.7 4.7 4.8 4.6 4.6 4.6 4.6 4.6 4.7	436 369 404 399 371 486 432 430 455 363 479 287	I 4 1	5430 8190 10423 8760	423	1 3 1	3044 9719 9679	
294755	5 1	1	8610	4.7	408	1950	1	8610	4./	408	•	0100	331	· ·	,01,	400
295016	, 4,	23	8153	4.7	37∀	1947 1948 1949 1950 1951 1952 1953	8 4 2 2 1 1	7826 7920 9395 9110 10655 8∠20 10980 9960	4 . 6 4 . 7 4 . 4 4 . 0 4 . 4 4 . 7 4 . 6	375 361 441 402 506 358 512 460						
295265	1	1	6510	4.4	287	1953	1	6510	4.4	287						
295390) 2	7	9145	4.7	423	1951 1952 1953 1954 1955 1956 1958	1 1 1 1	7900 10700 9060 8280 8980 9630 9390	4.7 4.5 4.5 4.6 4.8 4.7	309 485 409 304 434 438 439	 	9956 10060 8910 9356	459 459 394 417	1 1 1	9014 9221 9080	
295802	2 10	19	6740	5.1	341	1947 1948 1949 1950 1951	2 6 7 3	6100 6107 6424 7805 6840	4.9 5.0 5.2 5.2 4.9	296 302 333 403 334						
301060) 1	1	3740	4.8	179	1952	1	3740	4.8	179						
30.820) 2	6	7483	4.7	346	1947 1948 1949 1954	2 2 1 1	5905 7230 8010 8280	4.6 4.6 4.5	283 338 370 369						
3039 12	2 1	1	13210	4.6	003	1957	1	13210	4.0	ذنه						
30548 ⁶	9 I	3	7047	4.4	309	1949 1950 1951	 	7530 6456 71 60		345 288 295						
305496	, 14	13	8397	' 4•5	374	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 1 2 1 2 2 2 1 1	8820 11510 7480 8590 9746 7996 8520 8560 6910 7010	4.5 5.0 4.5 4.4 4.3 4.1 4.4	364 496 371 384 429 345 346 379 206						
30654	B 1	3	753(5.0	382	1951 1952 1953	1 1 1	7170 6430 9050	4.6	373 302 470						
30887	8 5	10	7246	4.8	348	1949 1950 1951	2 2 2	7330 6585 7240	5.4	361 356 326						

TABLE 15.--CAUGHTER-AVERAUE OF SIRLS IN SLRVICL IN ARTIFICIAL BRELOING ORGANIZATIONS--GROOPED BY BRLEO,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DALIGHTER	AV: I	RAGE	RY	SIRE	

											305-0AY	CONTIMO	. AV.	YEARLY HE	RO AVI	RAGE
SIKE NO.	DAOGHTERS NO.	KELUROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.	MILK L8.	TLST PCT.	FAT L8.	RECOROS NO.		FAT	RECORDS NO.	MILK LB.	FAT
						1952 1953 1957	G0ER 2 1 1	NSLY 6775 9520 7430	5.1 4.3 4.3	334 407 321						
30960	3 2	7	9085	4 - 4	399	1951 1952 1953 1954 1755 1956	1 1 1 1 1 2	6960 9880 10060 8190 9800 10355	4.1 4.8 4.8 5.0 4.8 4.2	287 470 486 407 468 436						
31026	3 1	4	9018	3.7	330	1951 1952 1953 1954	 	12860 8670 10000 4540	3.9 3.7 3.4 3.9	502 320 344 177						
31280	3 I	2	6770	5.0	338	1947	2	6770	5.0	338						
312+6	0 19	64	8470	4.9	411	1949 1950 1951 1952 1953 1954 1955 1956 1957	4 8 10 12 9 6 4 5 3	9108 8223 8629 7738 9456 9622 8895 9354 10313 9120	4.9 5.0 4.0 4.8 4.8 4.8 4.7 4.7	447 409 410 371 455 469 429 449 449	1 1 3 2 1 2 1 2	8600 9780 11347 10260 9060 10025 10040 9135	431 469 599 517 437 490 411 437	1 1	9014 9221 9516 9080	422 423 449 416
3148∠	4 19	64	8100	4.8	385	1949 1950 1951 1952 1953 1954 1955 1956	1 9 10 9 10 10 9 4 2	7310 8047 8238 8563 8447 8761 8379 8665 5675	5.0 4.7 4.7 4.7 5.0 4.7 4.9 4.5	302 379 306 401 415 407 411 382 407	,					
31513	0 1	1	6140	4.9	302	1955	1	6140	4.9	302						
31576	1 2	5	6998	5.0	340	1947 1948 1949 1951 1954	1 1 1 1	6590 4200 6430 9080 7430	5.1 5.2 5.2 4.5 4.8	338 218 334 411 354						
31764	6 1	1	11090	4.6	514	1956	1	11090	4.6	o 14						
31828	9 2	4	8410	4.7	394	1951 1952 1954	1 1 2	6770 8560 7825		305 409 367						
31842	9 3	8	6941	5.1	356	1954 1955 1956 1958	1 3 3 1	5110 5703 8027 9080	5.2 4.9 5.1 5.5	265 277 424 505	1	9770 7780	486 402			
31907	5 1	1	7720	4.3	330	1953	1	7720	4.3	330						
32087	3 5	17	6410	4.7	300	1948 1949 1950 1951 1952 1953	1 2 4 4 3 1 2	5500 9185 6583 6945 5280 6310 5755	4.7 4.7 4.6 4.6	262 437 308 316 238 255 248						
32260	0 1	2	9755	4.1	403	1953 1955	1	11450 8660	4.2 4.0	485 320				1	10410	505
32419	2 11	25	8176	4.7	385	1948 1949 1950 1951 1952 1953 1954 1956	1 1 4 4 3 2 4 3 1	9000 8150 7810 7990 8112 9165 8295 8183 9810	4.9 4.6 4.7 4.6 4.7 4.5 4.7	441 393 383 376 373 429 373 382 460	1	7160 9920 9760	387 574 477	1	8219	403
3285 t	4 21	47	8073	4.6	37∠	1948 1949 1950 1951 1952 1953 1954 1955 1956	7 10 7 7 1 1 4 2	7219 8346 7849 8509 8909 5790 9480 9345 9380	4.4 4.6 4.7 4.8 4.7 4.7 4.7 4.7	316 386 369 415 425 274 462 430 438 425	1	9590	457	1	8884	4 58
33009	3 1	2	5945	4.6	274	1956 1957	1	6710 5180	4.7	315 233						
33072	0 52	92	7946	5.1	401	1954 1955	12 22	7363 7623	5.3	390 387	1 2	8960 11410	474 510			
											_					

TABLE 15. -- UAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS -- GROUPED BY BR

	OAUGHTER	AVERAGE	8Y S1F	RE		н	ECORO AVE	RAGE	BY SIR	E RA	RESHENING	YEAK				
IRL NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.		MILK		YEAKLY H RECORDS NO.		FAI
						1956	GUERN 21	8198	5.0	409	3	9107	462	2	9064	40
						1957 1958 1959 1960	21 9 5 2	8648 8197 8828 8550	5.0	432 415 422 379	6 4 4 2	10043 10708 10003 9795	448 430 469 439	5 4 2 2	9579 10320 11064 10688	410 440 401
31204	1	2	7030	4.8	336	1958	2	7030	4 - 8	536	1	8770	418			
32185	1	2	6965	4.9	340	1959 1960	1 1	8250 56 80		388 292	1	10350 9930	447 425	1	11532 9625	504 45
32960	1	5	10324	4.4	457	1949 1951 1952 1953 1954	 	9770 11360 10490 9486 10520	4.5	421 485 472 446 460						
33176	2	2	6420	4.9	312	1950 1951	1	8390 4450	4.9	407 216						
33965	17	41	8491	4.6	589	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	5 6 0 4 1 4	8391 9118 8168 8340 8097 6998 7290 8773 11960 10130	4.5 4.7 4.7 4.6 5.1 4.7 3.9	403 439 369 391 384 322 371 390 462 414						
36228	45	100	7999	4.8	379	1950 1951 1952 1953 1954 1955 1956	3 12 21 23 16 12 4	8367 8270 8302 7949 8156 8513 7663 6881	4.7 4.7 5.0	376 383 391 390 381 400 378 336	1	8060	340	1	9723	42
30535	18	56	8428	5.0	415	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 5 6 8 11 5 5 5 4 4	9830 8928 8877 9286 8268 7734 9308 8244 8655 8600 7270	4.8 4.0 4.8 5.1 5.0 4.9 4.9 4.9 5.1 4.8 5.2	405 425 419 472 410 377 450 419 414 405 381	1 2 1	10180 9020 8660	413 409 407	1 2 1	9516 9064 8818	41
36587	ц	9	8380	5.1	421	1951 1952 1953 1954	3 3 2 1	6950 8433 9555 10650	5.2	361 436 452 494						
36940	70	131	8300	4.9	405	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	1 5 5 3 3 20 19 26 19 11 9		4.8 4.9 4.9 4.8	409 414 451 424 339 312 431 386 386 442 480 411	2 4 4 8	10340 10315 11693 10630 9586	481 529 545 552 460	1 1 6	10126 11173 9591	
38467	1	2	6410	4.2	270	1957 1958	1	6580 6240		284 255						
393 7 8	1	3	7003	4.8	340	1956 1957 1958	1 1 1	6270 7670 7070	4.6	288 370 362						
40985	1	1	9460	5.4	509	1953	1	9460	5.4	509						
427 18	1	1	8700	4.9	427	1959	1	8700	4.9	427	1	7/00	375			
42786	1	4	9530	4.7	453	1951 1952 1953 1956	1 1 1	9090 8660 9610 10760	4.7	400 407 463 541						
43683	15	30	7966	4.8	373	1951 1952 1953 1954 1955 1956 1957 1958 1959	8 6 5 2 2 2 1 1 2	8451 8002 6936 8655 4895 7770 8310 9830 9515	4.8 5.2 4.9 4.6 4.3	410 374 343 411 255 380 379 421 405	1 2	9220 8325	387 345	1 2	10410 8791	

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--KECOROS FROM THIS STATE ONLY

	DI TEAR	OF FRESI	PHILIAO.	KECO	KUS FK		21415 OME									
	OAUGHTEK	AVERAGE	BY SI	RE		R	ECORO AVI	RAGE I	3Y 51R	E BY	FRESHENING					
SIKE NO.	DAUGHTERS NO.	RECORDS NO.	MILK L8.	TEST PCT.	FAT LB.		RECOROS NO.				KCCORUS NO.	MILK LU-	FAT	YEARLY H	MILK L8.	FAI
						1960	GUÉRN	6700	4.5	502	1	8/40	411			
344841	1	4	10295	5.0	511	1953 1955 1957 1958	1 1 1 1	9830 9350 11800 10200	4.8 5.4 4.8 5.0	467 505 566 507	1 1 1 1	8830 8350 0168 0168	442 473 428 412	1 1	9712 9516 9897	141414
345310	1	4	8070	4.2	331	1956 1957 1959 1960	! 1 1	6390 8000 7920 9970	4.2 4.2 4.3 4.1	266 338 340 405				i 1	11401 10606	
346295	2	2	8985	4.5	405	1959	2	8985	4.5	405	2	8555	417	2	9538	4/3
346301	33	68	7958	4.8	377	1952 1953 1954 1955 1956 1957 1958 1959	2 12 13 19 10 8 2 2	7300 8150 8198 7951 8162 7896 7725 7710	4.7 4.8 4.8 5.0	322 366 387 380 387 386 416 365	, 1 1 2	7370 10660 8620	477 510 418	1 1 2	10072 10235	436 453 378
346708	1	3	10277	4.7	481	1952 1953	1	9580 11480	4.7	453 542		0020			.,,,	310
3 492 56	19	56	7988	4.6	367	1954 1952 1953 1954 1955 1956 1957	1 2 16 14 9 8 6	9770 7205 7971 8671 8120 7976 8050 5710	4.4 4.5 4.6 4.7 4.6 4.7	318 356 395 378 371 374 247	;	7470 7660	381 326	1	10083	403 405
350208	6	18	8430	4.7	395	1952 1953 1954 1955 1956 1957	1 6 5 2 2 1	8760 7670 8770 8785 9210 8600 10890	4.6 4.8 5.1 4.7 4.6							
350867	1	2	8715	5.3	465	1954 1955	1	8230 9200		458 492						
3540/3	2	5	8564	4.8	408	1955 1956 1957 1958	1 1 2 1	9230 7060 8175 11870	4.6 4.9	446 328 400 548	1 1 1	6420 8620 8710	335 408 425	1	8371 8622 9374	385 405 447
354224	1	1	9170	4.4	403	1959	1	9170	4.4	403	1	10670	533	1	9756	443
356919	19	64	7610	4.9	368	1949 1950 1951 1952 1953 1954 1955 1956	3 9 7 14 12 6 6 5	8373 8456 8190 7096 7601 8130 7428 9316 7325	4.8 4.8 5.0 5.0 4.9	406 403 388 341 378 402 362 451 363	1	10600	500			
358614	2	7	9587	4.7	452	1951 1952 1953 1954 1955	1 1 2 1 1	11070 10040 8705 9950 9530 10890	4.8 4.8 4.4 4.5							
359070	1	1	8210	5.1	419	1954	1	8210	5.1	419						
362356	ı lı	4	8038	5.1	408	1959	4	8038	5.1	408	4	7348	430	ц	9884	432
363656	7	14	8417	4.8	407	1955 1956 1957 1958 1959 1960	2 3 3 1 4	6975 7057 8157 8390 9833 13980	5.0 5.2 5.2 4.6	362 352 422 440 452 645	1 1 1 3	7460 8310 7730 9723 11550	343 311 454	1 1 1 2	7336 7532	3/4 332 3/3 3/3
363826) 108	217	8010	5.0	396	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 9 17 36 37 52 33 18 16	7866 7616 8222 8396 8048	4.8 4.9 4.8 4.9 5.1 5.0		1 2 4 6	7130 8185 8775 8700 10696	421 451 409	1 1 1 4 8	8644 062?	3/9

TABLE 15.--DAUGHTER-AVERAGE OF STREET IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVLRAGE	BY 516	RL		R	ECORD AV	LKAGE 1	3Y 51R	Ł BY	FRESHWN1NJ	YEAR				
S146 NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS		TE51 PC1.		305-DAY (RECURDS NO.		FAI	YEARLY HE RECORDS NO.		FAT
						1960	SULK		5.1	497	14	9890	489	1	12001	499
366048	3 1	i	8210	4.4	364	1959	1	8210	4.4	304		9540	493	1	bt 29	451
371263	3 18	24 E4	8651	4.6	399	1951 1952 1953 1954 1955 1956	1 5 12 11 5 4 2	9820 7242 8482 9119 7306 9088 8825	4.6 4.7 4.7 4.5	429 336 391 424 360 408 395	i i i i 2	7120 10160 8900 8450 8920	323 553 371 372 397	1	8600 d32d	3//
						1958 1959	ک ا	8920 8980	4.6 4.0	409 301	ı	7460	349	1	7107	3 6 3
37186.	5 1	1	7260	4.4	316	1958	1	7260	4.4	315						
37∠994		1	8470	5 • 1	437	1954	1	8490		437						
380178	3 12	17	8584	4.8	407	1955 1956 1957 1959 1960	7 4 2 3 1	7881 8660 6790 11033 9340	4.1	368 421 301 494 372	2	8945 8330		ı	8340	4, 0
380662	! 1	i,	9903	5.0	488	1955 1956 1958 1959	1 1 1	7880 10410 10130 11190	5.0 5.0	384 522 503 344						
38 10 20		11	6697	5.1	341	1951 1952 1953 1954	4 2 4 1	6880 5990 6963 5130	4.9 5.0	347 294 348 250						
385569	3	7	7297	5.0	361	1956 1958	2 2	8150 8120	5.0 4.6	405 388	1 2	8000 7810	379 351	1 2	8339 8240	
						1959 1960	2	7410 6350	4.9	356 269	2	7600 7970	370 3 75	2	6344 7477	275 313
386975	5 1	1	8020	5.0	400	1959	1	8020	5.0	400	1	8750	414	1	9538	423
38 7 8 7 9	5	9	7861	5.1	400	1954 1955 1956	2 4 3	9015 7743 6587	5.5 5.1 4.0	494 387 316						
390507		1	8650	5.5	478	1952	1	8650		478						
390915	, 4	13	10737	4.8	510	1953 1954 1955 1956 1957 1958	1 4 3 2 2 1	15710 9658 11983 8355 10260 11280	4.9 4.6 5.0 4.8	696 475 552 420 465 574	1 1 1	8590 9500 9150 9850	417 448 459 474	1	3949	421
391225	2	6	8613	4.7	405	1953 1954 1955 1956 1957 1958	1 1 1 1 1	8030 7580 9480 8770 8610 9220	4.5 4.7 4.9 4.7	366 341 441 431 403 449						
392657	1	1	9540	5.2	494	1959	1	9540	5.2	494	1	9120	433	1	9538	4, 3
39.3390) 7	10	8370	5.0	420	1953 1954 1955 1956 1959 1960	1 3 1 2 2 1	8840 9380 6805	4.9 5.1 4.7	346	}	9320 10550	460 482			
39530	3 I	2	7510	4.7	350	1959 1960	1	7650 7370		360 339	-	8080 7600	394 373	†	8186 8083	306 306
396152	2 1	2	8080	4.3	345	1959 1960	1	8910 7250		392 297		10670 6840	534 309	1	7756 7619	448 34 7
399670	2	14	6373	4.5	285	1954 1956 1959 1960)))	6090 6980 7940 4480	4.4	276 304 370 189	÷ 1	10690	534 314	1 1 1	7172 9756 7870	447
399671	ė lį	6	6855	4.8	328	1953 1954 1955 1959	1 3 1 1	8100 6380 8150 9010	4.9	395 319 370 417	1	8540	408			
4022 36)	3	8530	4.8	411	1952 1953 1955	1 1 1	8820 6680 10090	5.0	393 336 503						
406702	2 5	20	8896	5.0	439	1953 1954 1955 1956 1957 1958	3 3 3 2 2 2	7723 8483 8917 9075 7670 6680	5.1 5.0 5.1	390 434 449 459 384 324	1 1	10870 10790 10160	418	1	10126	419

272

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

											ZOS-CAY (CONTEND	4.1/	VCAULY O	EDI: ANG	D.AC.E
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.	L8.		FAT L8.	RECURDS	MILK		RECORDS NO.		FAT
						1959 1960	GUERI 4 1	11030 10330	4.9 5.4	541 555	!	9980 8190	404 404			
409032	2 3	6	8948	4.6	411	1953 1954 1955 1956 1959 1960	 	8480 12750 8580 7220 10270 6390	5.1 4.4 4.7 4.9 4.5 4.1	430 556 402 351 463 263	}	10650 6880	532 310	;	9756 8153	
412090	0 1	2	8740	5.4	465	1959 1960	1	8430 9050	5.3 5.4	443 486	1	5750 7320	279 326	I 1	6344 7477	
413430	6 I	5	7280	5.4	391	1951 1953 1954 1955 1956	1 1 1 1	8050 6930 7310 8170 5940	5.8 5.7 5.9 4.5 5.0	464 395 431 370 297						
41414	5 27	52	8255	4.8	398	1953 1954 1955 1956 1957 1958 1959	3 10 8 8 8 8	8900 8336 8181 6428 8270 8455 8607	5.1 4.8 4.9 4.5	423 405 414 400 407 378 395	2 1 3 3	9230 8950 9510 9097 9368	437 470 463 428 427	1 2 3 3 6	10072 9576 9697 9668 9439	404 456 451
41535.	3 29	94	9038	>.1	461	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 11 12 13 17 13 11 10 2	8222 8400 8692 8308 9195 9190 10108 9378 10080	5.0 5.0 4.9 5.1 5.0	445 436 435 415 451 471 506 474	1 3 3 5 6 6 7 2	9420 8633 8743 10794 9903 10112 10361 10490	445 414 412 535 499 491 522 531	2 2 3 2	8382 8393 8382 9047	407 414 410 432
41667	5 2	3	8478	5.1	431	1958 1959	1 2	7480 8575		444 444	1 2	10370 8830	440 427	1 2	9211 9538	447
41720	7 4	7	8133	5.0	405	1954 1955 1956	4 2 1	8285 7035 9290	5.0	421 348 454						
42253	8 I	1	7060	4.1	288	1958	1	7060	4.1	285						
42617	3 18	39	7730	5.1	39 2	1953 1954 1955 1956 1957 1958 1960	2 13 8 8 3 4	5480 7925 7556 8381 7753 9360 7950	5.0 5.2 5.2 5.6 5.1	267 394 390 438 431 473 383	1 4 2 3 1	9110 9750 10170 9020 0c101	448 453 416 444 452	1 4 2 3 1	7096 8363 8660 9243 8796	341 407 479 445
42939	6 5	9	8293	4.9	406	1955 1956 1957	4 3 2	8558 7920 7785	4.7	431 370 356						
43152	3 15	29	8326	5.3	435	1954 1955 1956 1957 1958 1959	6 4 8 4 6	6992 8333 8323 8993 9955 7370	5.0 5.2 5.4 5.2	387 412 431 479 509 366	2 2 3 1	10045 11915 9130 9300	509 623 472 493			
43139	5 32	66	7732	. 4.8	371	1952 1953 1954 1955 1956 1957 1958 1959	2 10 14 13 8 9 7 2		4.9 4.7 4.7 4.8 4.6	410 408 360 393 358 408 386 364 298	1 1 2 3 1 4 1	10200 9280 9405 8830 10710 9353 9900	501 463 448 427 538 444 392 434	4 3 1 2 2 1	8164 8746 8022 8562 9173 16715	342 378 307
43306	.5 4	ý	9266	4.4	405	1953 1954 1955 1956 1957 1959	1 2 2 1 2	6310 8745 7120 7120 9790 10520	4.2 4.4 4.4	267 393 306 312 429 461	1	10330	432	1	11837	471
43338	4 1	1	10120	5.4	544	1954	1	10120	5.4	44ر						
43373	0 1	2	6000	5.4	325	1959 1960	1	6240 5 76 0		343 307	1	85 10	422	1	9538 10061	4. 3
43556	9 5	7	6769	5.2	354	1954 1955 1956	2 1 2	673 a 825 0 649 0	5.0	379 415 320						

4.8

TABLE 15.--DAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

4.8

4.9 L22 NEW JEKSEY

TABLE 13.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE SY SIRE BY FRESHENING YEAR

SIRL NO.	DAUGHTERS NO.	RECORDS NO.	MILK	TEST PCT.		FRESH YEAR	RECURUS NU.		TEST PCT.	FAT LB.	305-DAY (RECURDS NO.	MILK	. AV. FAT Lô.	YEARLY HE RECORUS NO.	MILK	
							GULK	VSEY.								
						1956	6	9235	5.1	470	4	9510	429	1	6644	464
						1957	'5	9756	5.3	513	1	9370	415	1	8622	40.5
						1956	14	12155	4.8	381	1	11070	532	1	10420	513
						1959	11	9701	5.1	497	0	9565	455	5	10481	460
						1960	1	8010	4.7	373	1	9000	396	1	10856	428
494007	7 2	3	6586	4.5	300	1956	1	5980	4.1	240						
						1957	1	3310	4.4	146						
						1959	1	8530	4.1	403	1	1290	338	1	7859	3/3
507027	3	3	10150	4.6	463	1959	3	10150	4.0	463	5	10470	467	ک	10664	404

TABLE 15.--BAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER				NO3 FF		STATE UN) V		Los Curabas Man
	OAUGHIER	AVERAGE	81 211	KL		К	ECOKO AV	ERAGE I	SY SIK	E BY	FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERD AVERAGE
SIRE NO.	OAUGHTERS NO.	RECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	RECORDS MILK FAT RECORDS MILK FAT
							HOLS	TLIN			
561789	7 1	4	13228	3.6	475	1947 1948 1949	2 1 1	12535 13550 14290	3.5 3.7	448 473 532	
654594	, 28	115	11411	3.8	434	1947 1948 1949 1950 1951 1952 1953 1954	55 13 15 14 10 3 3	10791 12355 12592 11402 12342 12327 12467 14250 8380	3.9 3.7 3.6 3.8 3.6 3.8 3.6	415 458 475 432 467 444 479 548 298	
669224	¥ 55	168	12127	3.5	425	1947 1948 1949 1950 1951 1952 1953 1954 1955	132 8 4 5 4 2 2 2	12313 12130 13638 12075 12724 11405 13050 12810 12035 13090	3.5 3.8 3.7 3.8 3.6 3.6 3.7 3.8 3.7	433 458 498 451 454 412 482 480 445	
669721	1 1	1	10410	3.1	325	1955	1	10410	3.1	325	
673095	5 2	11	13118	3.5	466	1947 1948 1949 1950 1951 1952 1953	3 2 1 2 1 1	13030 13045 11240 11220 15660 17710 14710	3.6 3.9 3.4	459 469 434 382 626 661 534	
673529	5 96	354	11704	3.8	440	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	98 35 41 40 33 30 24 23 12 6 5	11217 11983 12360 12242	3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.6	453 461 448 471 497 498 526	2 11275 437 1 11685 456 2 13945 534 2 10917 409 2 13945 506 2 13200 473
67504	3 2	6	13627	3.6	485	1950 1951 1952 1953 1954	1 1 2 1 1	16250 14210 16710 10540 7340	3.5 3.4	599 520 587 358 201	
675831	7 60	175	10483	3.6	378	1947 1948 1949 1950 1951 1952 1953 1954	8 6 4 1	12513 13045 11640	3.5 3.6 3.5 3.5 3.5 3.3	418 431	
675839	9 33	135	11151	3.6	395	1947 1948 1949 1950 1951 1952 1953 1954 1955	82 16 10 7 7 7 3 1	11212 11606 12267 11880 12050 11644 10553 14030 14240 10350	3.5 3.4 3.6 3.5 3.5 3.5 3.4 3.8	401 404 422 428 428 409 369 484 541	
67584	1 2	3	8893	3.9	347	1947 1948	2	8615 9530		336 357	
679129	9 15	66	12107	3.5	421	1947 1948 1949 1950 1951	52 5 4 3 1	12430 13780 12183 13660 11960	3.6 3.5 3.5 3.5	441 492 429 478 426 523	
68007	4 1	1	16340	3.5	574	1947	1	16340	3.5	574	
68207	2 2	2	11335	3.5	387	1949 1952	1	8020 14650		299 474	
68499	1 1	5	12440	3.8	466	1951 1952	-	13220		459 429	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

	DAUGHTER	AVERAGE	8A 21	R.		R	ECORD AV	RAGE	Y SIR	FRY	FRESHENING	YEAR			
SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NO.		TEST PCT.		305-UAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.	FAT
						1953 1954 1955	1	TEIN 12060 12690 13090		445 499 498					
695641	1	2	12530	3.7	455	1949 1950	1	10890 14170	3.8 3.5	415 495					
698483	3 2	8	11272	3.5	395	1949 1950 1951 1952 1953 1954	1 2 2 1 1 1	8070 9860 13375 12600 13900 12160	3.5 3.4 3.6 3.4 3.5 3.5	286 328 480 433 484 423					
699452	2 1	2	12670	3.6	455	1950 1951	1	11140 14200	3.5 3.6	396 513					
70084	1 1	1	14930	3.3	496	1950	1	14930	3.3	496					
70474	7 3	8	13444	3.3	##0	1949 1950 1951 1953 1954	3 1 2 1 1	12983 11270 12930 12930 16260	3.3 3.3 3.2 3.4 3.4	427 373 415 438 547					
70510	1 1	1	6650	3.6	236	1949	1	6650	3.6	236					
71095	7 10	30	11270	3.5	394	1948 1949 1950 1951 1952 1953 1954 1955	1 6 6 4 5 1 4 2 1	13300 11187 12373 12113 12788 11830 12858 10970 8620	3.2 3.4 3.4 3.3 3.5 3.8 3.7 3.7	431 379 423 401 442 452 484 406 264					
71132	3 7	21	12094	3.7	442	1947 1948 1949 1950	14 3 3 1	12044 12487 11180 14380	3.7 3.8 3.8 3.8	441 466 420 462					
71551	2 27	90	11988	3.5	424	1947 1948 1949 1950 1951 1952 1953 1954 1955	28 13 9 11 11 4 4 5 2	11473 11876 12939 12679 12435 12870 13470 14192 11970 11870	3.6 3.5 3.6 3.4 3.4 3.5 3.5 3.5	409 421 450 456 422 433 473 500 459 421	1	12270 11550 14160 15220 12e10 13670	460 427 456 514 455 477		
71830	3 22	83	11753	3.7	43∠	1947 1948 1949 1950 1951 1952 1953	49 11 10 3 7 1 2	11471 11427 13405 13880 13280 12820 13945	3.7 3.7 3.7 3.7 3.7 4.0 3.6	425 419 496 512 497 508 494					
71834	4 1	5	11552	3.3	378	1953 1954 1955 1956 1958	1 1 1	10280 13130 9840 11800 12710	3.3 3.4 3.3 3.0 3.4	336 441 328 354 429					
71959	3 1	1	13160	3.4	453	1949	1	13160	3.4	453					
72427	0 3	9	11273	3.7	412	1947 1948 1950 1951	6 1 1	12560 11380 15100 15390	3.7 3.8 3.6 3.5	459 431 546 536					
72427	2 8	13	11270	3.7	405	1947 1949 1950	11 1 1	11358 11340 10420	3.6 3.6 3.7	406 411 381					
72427	7 4	13	11445	3.5	ц Оц	1947 1948 1949 1950 1951 1952 1953	1 3 2 2 2 1 1	7880 10897 12195 13210 11400 12710 11800 12070	3.2 3.4 3.5 3.6 3.8 3.8 3.9	249 376 413 457 404 477 446 408					
72576		1	12720	3.1	393	1949	1	12720	3.1	393					
72605	4 20	58	10732	3.7	394	1949 1950 1951	6 11 7	12120 10354 10687	3.7 3.7 3.9	443 387 412					

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

		AVERAGE					ECORD AVI		BY SIR	ЕВҮ	FRESHENING	YEAR				
		RECORDS					RECOROS		TEST		305-0AY 0 RECORDS NO.	ONTEMP MILK	- AV.	YEARLY HE	RD AVE	RAGE FAT
NO.	NO.	NO.	LD.	PCT.	LD.	YEAR	NO.		PCT.	LB.	NO.	L8.	LU.	NO.	LB.	Lii •
						1952 1953 1954 1955 1956	11 9 6 5 3	10867 11298 11347 12094 12197	3.6	399 404 402 436 419						
726056	14	45	1096B	3.7	409	1947 1948 1949 1950 1951 1952 1953 1954	23 7 5 3 3 2 1	10979 11127 12396 10553 12080 8700 12850 11040		407 407 446 371 446 299 448 386						
726064	6	16	10977	3.7	394	1947 1948 1950 1951 1952 1953 1954 1955 1956	4 2 1 1 1 1 2 2 1	11093 11770 14720 14740 11390 10630 12175 10005 10630 12250	3.5 3.6 4.2 4.0 4.2 4.1 4.1 4.1	378 382 615 596 478 438 499 409 436 490						
727609	1	1	9660	3.4	331	1948	1	9660	3.4	331						
729025	1	2	12160	3.5	425	1947	2	12160	3.5	425						
733976	1	1	12810	3.7	470	1953	1	12810		470						
738851	167	572	11491	3.8	432	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	46 28 42 60 84 78 64 58 43 26 10	10605 11348 11637 11550 11857 11574 11827 12165 12136 12445 13213 12137 11578 11230		396 410 431 426 443 441 454 458 473 502 458 395 357	1 1 2 2 6 5 5 5 5 2 3 1	16060 9320 13950 13470 13548 13646 13192 13624 11210 10633 10750	3B8	5 6 5 2 3 1	12718 12128 12515 10840 11122 10529	477 457 474 412 411 3d3
739272	1	2	9595	3.6	339	1947 1949	1	7920 11270	3.5 3.6	276 402						
742676	1	1	14610	3.6	531	1950	1	14610	3.6	531						
743063	1	5	13622	3.8	515	1948 1949 1950 1951 1952	1 1 1 1	10230 13640 14050 14250 15940	3.7 3.8 4.0 3.7 3.7	375 521 562 521 594						
747241	1	5	15950	3.2	519	1948 1949 1951 1952 1954	1 1 1 1	16550 16130 17380 15490 14200	3.1 3.3 3.2 3.4 3.2	539 539 553 530 458						
747242	9	22	11337	3.3	372	1951 1952 1953 1954 1955 1956 1957	2 7 6 2 2 1 1	11575 10229 12052 8825 10700 5680 12070 15430	3.1 3.6 3.4 3.0	372 333 385 278 382 198 366 557	1	12940	466	1	10780	392
748439	124	419	11958	3.6	431	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	99 56 59 52 41 37 30 23 14 5	11824 12401 12802 12739 13356 12465 12313 12615 12559 11440 15455	3.6 3.7 3.6 3.6 3.6 3.6 3.5 3.4	435 449 468 466 481 451 441 449 433 385 521 479	1 1 1	15360 13870 16320 15650	534 517 623 616	1	13309	50 ì
748441	54	171	11960	3.6	428	1947 1948 1949 1950 1951 1952	41 11 13 9 14 18	11356 11275 13728 11908 12286 12089	3.5 3.5 3.6 3.6 3.7 3.6	401 395 484 427 454 437 434						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

278

	DAUGHTER	AVERAGE	BY 516	RE		R	ECURO AVI	ERAGE E	BY SIK	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY C RECORDS NO.		FAT	YEARLY HI RECOROS NO.	MILK	RAGE FAT LB.
						1954 1955 1956 1957 1958 1959	HOLS 16 14 7 7 2 1	TE1N 12833 14094 14784 13593 13460 8330	3.7 3.7 3.7 3.7 3.8 3.7	473 517 551 502 510 305	1	9830	356	1	10747	391
748442	27	110	11284	3.7	418	1947 1948 1949 1950 1951 1952 1953 1954	54 14 10 11 6 7 5 2	11094 10923 12160 12622 12047 12689 12220 12550 15270	3.7 3.5 3.6 3.7 3.7 3.5 3.7 3.5	410 403 423 454 439 465 429 466 474						
748817	3	9	10387	3.5	362	1952 1953 1954 1955 1956 1957	2 2 2 1 1	9715 9365 12385 10490 12510 11270	3.7 3.6 3.5 3.7 3.6 3.5	357 335 435 390 445 393						
749057	3	14	8240	3.6	295	1952 1953 1959	1 2 1	7780 4815 13150	4.0 3.5 3.4	309 171 453	1	12070	431	1	10268	383
749201	126	402	11947	3.6	#3#	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	36 19 16 49 44 37 33 27 19 5	11873 12155 12814 12136 12205 12549 12120 13012 13055 12224 12359 12062 13090 12120	3.5 3.6 3.7 3.6 3.7 3.6 3.7 3.6 3.7 3.6 3.7 3.6 3.7 3.6	414 428 460 447 441 459 437 472 480 449 440 463 489	1 1 2 2 2 2 3 3 3 3 5 5	12730 13250 13010 13305 13295 13243 14600 14650 14893 13657 11244 10810	455 522 524 530 493 545 551 557 581 529 424 416	3 3 2 2 2 4 2	12579 12135 13462 11696 11685 11375	478 461 511 464 451 432
75 03 49) lų	11	12260	3.5	427	1949 1950 1951 1952 1953 1954 1956	1 1 2 1 2 2 1	11210 13630 11705 11390 14625 11020 12390 11510	3.5 3.6 3.8 3.4 3.3 3.7 3.6 3.1	396 485 440 385 471 406 448 359						
755101	1	1	6980	3.7	260	1949	1	6980	3.7	260						
755659	2 16	75	10399	3.6	37 2	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	29 9 10 6 9 3 3 1 1 1 1	10494 10126 11080 10410 10483 11863 11460 9050 10130 9540 8140 8110	3.6 3.7 3.6 3.5 3.4 3.7 3.8 4.0 3.6 3.9	374 366 401 379 365 404 419 346 381 403 540 319 293						
756626	, i	7	11490	3.7	423	1952 1953 1955 1956 1957 1959	1 1 2 1 1	9760 9210 11445 12800 10290 15180	4.0 4.2 3.8 3.6 3.4	390 390 428 461 350 518	1	15220	560	1	15925	584
758846) li	10	13307	3.8	501	1951 1952 1953 1954 1955 1957	1 1 2 2 2 2 2	16870 13800 13920 13425 14200 11550	3.5 4.1 3.7 3.8 3.7 3.7	590 563 501 501 522 423						
760474	. 2	5	14102	3.8	529	1955 1956 1957 1958 1959	1 1 1 1	12020 13120 13000 14190 15120	3.7 3.7 3.8 3.6 3.8	445 492 494 506 573	1	12770	488	1	13625	. 499
760B 56	2	7	12836	3.4	434	1948 1950 1951 1952 1953	1 1 2 1 2	12810 12390 12380 11350 12665	3.3 3.4 3.7 3.2 3.2	427 426 453 366 402						
761977	3	10	10/30	3.8	399	1951 1952 1953	i i 2	12760 11200 11635		455 426 419						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

279

DAUGHTER AVERAGE 89 SIRE

SIRE NO.	DAUGHTERS NO.	.KECOROS NO.		IEST PCT.		FRESH YEAK	KECORDS NO.		TEST PCT.				FAT	YLAKLY F RECORDS NO.	MILK	
						1954 1955 1957 1958 1959	1	TEIN 12015 13210 11470 12900 9740	3.8 3.6 3.5 4.0	438 503 416 449 386	1	11170	404	1	12132	453
76300	8 50	158	11343	3.8	427	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	79 17 13 15 7 7 4 6 5 3	11335 12026 12038 11197 11714 12120 13398 14317 16234 11103 13430	3.8 3.9 3.9 3.9 3.8 4.0 4.0 3.9 3.8 3.9	427 461 467 442 438 483 537 549 607 431 531						
765514	4 12	33	11105	3.6	403	1947 1948 1949 1950 1951 1952 1954 1955	21 2 4 1 1 1 1 1	10854 11540 12608 11340 13000 14790 16190 13280 11390	3.6 3.4 2.6 3.8 3.8 3.6 3.7	392 398 420 319 492 562 577 496 434						
76606	5 1	1	7850	3.4	269	1951	1	7850	3.4	269						
769170	0 18	44	14405	3.8	550	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 3 5 4 5 5 5 6	12400 11560 14207 13472 15258 15564 16896 15476 16566 14033 13470	3.9 3.7 3.8 3.4 3.8 4.0 3.7 3.8 4.0 3.7 3.8	481 433 535 515 532 591 667 575 632 546 473		14 130 14 100 13790	532 546 507	1 5 1		535
770144	6 11	32	11075	3.6	400	1948 1949 1950 1951 1952 1953 1954	6 5 8 4 2 2 3 2	11592 12106 11280 12900 12815 13060 12857 11950	3.6 3.6 3.7 3.7 3.5 3.5 3.4 3.5	420 439 415 480 450 452 438 409						
77 16 0.	2 2	6	10704	3.8	411	1951 1952 1953 1954 1955 1956	I 1 1 1 1	11500 10430 9250 10230 9570 10060	4.1 3.5 3.5 3.5 3.5 3.6	471 367 321 361 338 361		12320 11530			10072 11118	
77218	9 1	3	12610	3.4	436	1950 1951 1953	1	12140 11940 13750	3.4 3.3 3.6	410 398 499						
77238	0 1	4	11635	3.B	440	1950 1951 1952 1953	1 1 1	12470 11660 10310 12100	3.7	480 432 399 448						
17293	2 14	43	9872	4.0	390	1947 1948 1949 1950 1951 1952	1 3	13570	3.6 3.9 3.9	525						
77526	4 1	1	16260	3.6	579	1958	1	16260	5.6	579	1	12650	486			
77665	2 1	2	12740	3.3	424	1954 1955		12410 13070		424 423						
77870	0 2	8	10890	3.6	387	1947 1948 1949 1950 1951 1952 1953	2 1 1 1 1	10485 8520 12610 9610 15240 16220 5570	3.4 3.9 3.8 3.6 3.7 3.6	359 333 480 342 558 588 191						
7797 1	5 2	10	9471	3.4	317	1947 1948 1949 1950	4 2 2 2	11808 9675 8585 9915	3.4 3.3 3.4 3.3	402 318 287 321						
78021	4 17	52	10905	3.6	388	1947 1948	6 8	10882 10518	3.7 3.6	400 370						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE DAL	JGHTERS F	RECOROS NO.		TEST PCT.		FRESH YEAR	RECURUS NO.		TE5T PCT.	FAT L8.	305-0AY CO RECORDS NO.		FAT	YEARLY HI RECOROS NO.		FAT
						1949 1950 1951 1952 1953 1954 1955 1956	HOL5 6 8 5 5 4 3	10552 10778 11131 12410 11478	3.7 3.5 3.5 3.5 3.5 3.5 3.5	357 396 391 434 407 475 362 382 409						
780230	70	218	11484	3.7	423	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1958	67 23 28 26 29 16 12 8 4 3	12376 10573 12044 11923 12413	3.8 3.6 3.7 3.6 3.7 3.9 3.8 3.2	422 411 461 401 432 438 441 444 425 401 484	1	13290	505	1	12502	Ա Ն Ա
780456	76	205	11556	3.6	412	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	12 14 31 30 30 20 9 8 7 4 6	11549 11489 11959 12139 11839 12082 11993 12581 12396 11881 11890 9292 11050 10400	3.4 3.5 3.6 3.6 3.6 3.7 3.8 3.9 3.7	404 391 420 445 441 441 432 435 462 451 468 339 339 335	2	10100 9860 10760	370 380 381	2 2 1	10742 9756 10529	394 369 383
782794	50	151	11514	3.5	401	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1959	1 10 22 32 18 22 14 12 10 7	10980 10443 11484 11480 12028 12008 11809 12554 12070 12649 13990 15830	3.5 3.4 3.5 3.5 3.5 3.5 3.5 3.5 3.4	385 352 397 400 419 419 408 437 411 427 474		11520	406		11750	
784231	1	2	7950	4 - 1	320	1954 1957	1	9330 6570	3.9	365 274						
786366	1	1	12760	3.3	4 19	1958	1	12760	3.3	419	1	11270	439	1	11456	437
787014	1	1	9940	3.6	361	1959	1	9940	3.6	361	1	12480	455	1	12393	452
787382	2	3	11723	3.7	429	1951 1953	2 1	11055 12390	3.6 3.7	397 461						
788399	3	17	11328	3.6	411	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1	9090 10270 11760 8810 10295 10955 108B5 10370 11343 12890 11846	3.3 3.4 3.6 3.5 3.4 3.7	477						
79 1296	2	6	12124	3.2	385	1948 1949 1950 1951 1954) 	11860 11295 12390 12230 14310	3.2 2.9 3.0	363 363 366						
792129	5	12	11518	3.3	385	1947 1950 1951 1952 1953 1954	2 2 1 1	10835 10070 12750 10720	3.3 3.6 3.6 3.4	299 381 361 436 356						
798291	ì	5	11934	3.5	418	1954 1955 1957 1958	1	11220 10160 13150 12620	3.8 3.4	387 445						

TABLE 15.--OAUGHTLR-AVERAGE OF SIRLS IN SLRVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	OAUGHTER				KUS FR		STATE ON		av		500 A	V				
	UAUGHIEK	AVERAGE	84 21	KE		R	ECORD AV	ERAGE (BY SIR	E BA	FRESHENING		41/	U. ADI U. 11	CIND AVI	0.4.0.0
SIRL (NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.	L8.	TEST PCT.		RECORDS NO.	MILK LB.	FAT	YEARLY H RECORDS NO.	MILK L8.	FAI
						1959	HDL5	12520	3.5	443						
798451	1	1	9620	4.4	425	1949	1	9620	4.4	425						
799361	3	13	12597	3.5	441	1947 1948 1950 1951 1952 1953 1954 1955 1957	1 1 2 2 1 2 1 1	11600 11140 10330 11330 10130 10315 14530 16670 12230 14730	3.1 3.5 3.5 3.7 3.5 3.7 3.5 3.7	365 349 360 389 354 381 510 644 447 524	1	12840	426			
799199	51	168	11481	3.6	412	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	32 22 28 25 21 13 10 7 5	12188 10973 11996 11703 11058 11519 12454 11653 12014 11323 7030	3.6 3.6 3.6 3.5 3.4 3.6	438 395 421 423 391 408 428 399 430 408 267						
800015	1	5	11124	3.9	439	1948 1949 1950 1951 1952	1 1 1 1	11230 10080 7810 13350 13150	4.0 3.4	425 400 268 555 548		/				
802505	1	1	9170	3.8	350	1955	1	9170	3.6	350						
804734	1	3	12227	3.4	415	1951 1952 1953	1 1 1	11870 11650 13160		409 388 447						
805118	1	2	8045	3.3	268	1955 1956	1	7540 8550	3.4	259 277						
805332	67	187	1 12 13	3.7	415	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	2 23 29 26 29 20 21 18 6	9600 10987 10792 10238 11362 11770 12504 12831 13772	3.8	364 412 407 390 411 442 453 466 479 477 598 416		10000 11240 13485 12960 11135 12900 15950 13800	416 505		11451 12743 12432 13963 15086	42 1 465 456 525 550
806256	66	179	11458	4.0	455	1949 1950 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 3 3 29 40 34 25 19 12	9303 11393 10796 11547 11672 11846 12169 11947 11739	4.0 4.0 4.0 4.0 4.0 4.0 3.9 3.9	503 377 454 425 462 463 472 474 459 458 486	1 2 1 3 8	10560 13990 10245 13850 11880 13040 10800	454 388 473 438 487	1 3 9 1	10399 12030 12855 10617	414 452 481 386
808916	1	6	11790	3.9	456	1952 1953 1954 1955 1956 1957	1 1 1 1	10060 9820 10510 12620 13970 13760	3.7 4.0 3.9	362 361 423 489 542 561						
809813	1	1	12540	3.6	446	1951	1	12540	3.6	446						
811743	341	834	11506	3.6	416	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 2 60 125 165 186 120 84 54 33	13550 8295 11214 11377 11801 12109 11748 12356 11682 12147 9110	3.6 3.6 3.7 3.6 3.6	402 292 409 413 424 440 428 444 418 438 317	1 8 8 13 14 14 18 28	11110 11513 13429 12493 13184 13336 12264 12709 12305	380 433 495 469 499 503 467 472 446	15 14 17 15 26 2	11944 12426 12472 12244 12479 12491	440 466 471 457 462 469
812359	=1	1	9600	2.8	269	1953	1	9600	2.8	269						
812635	23	92	11485	3.8	436	1947 1948 1949 1950	1 9 15 17	9360 11099 11592 10855		362 423 435 413						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

282

	OAUGHTER	AVERAGE	BY 516	RE		R	ECORD AV	ERAGE	BY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTER5	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.			FAT LB.			FAT	YEARLY HI RECORDS NO.		FAT
						1951 1952 1953 1954 1955 1956 1957	HOL5 16 14 5 7 3 2 1	TEIN 11475 11134 10572 11566 11017 11205 10870 9695	3.6 3.7 3.6 3.8 3.9	437 423 391 420 418 431 443 364						
813564	1	1	8380	3.6	305	1952	1	8 38 0	3.6	305						
8 146 76	1	1	12640	3.3	415	1952	1	12640	3.3	415						
815143	8	14	12781	4.3	538	1955 1956 1957 1958 1959	2 1 1 4 6	10545 10760 11940 13423 14182	4.4 4.4 4.6	449 477 528 610 576		14017 13558		1	12622	462
818179	5	10	9146	3.6	322	1948 1949 1950 1952 1953 1954 1955	1 2 1 1 1 2 1	7850 10690 11560 12290 9890 9855 6790 5260	3.5 3.8 3.4 3.4 3.2 3.9	300 373 441 418 335 316 265 198						
818313	15	33	11656	4 - ک	393	1947 1948 1949 1950 1951 1952	15 3 4 2 3 2	11891 10703 12120 12348 12065 12207 10210	3.4 3.5 3.6 3.4 3.4	394 360 417 435 416 413 354						
818459	1	1	9080	4.1	370	1952	1	9080	4.1	370						
820086	70	178	11312	3.8	426	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 2 15 41 35 33 22 14 5 8	9220 11825 10237 11606 11736 10946 10751 11364 13250 12676 7500	3.9 3.9 3.8 3.8 3.8 3.7 3.8	371 459 396 452 448 415 407 425 501 441 264		11980 13990 12250 11890 12050	464 547 482 428 432	1 5 1	11282 11892 12533 11881	452 455
822064	1	6	11172	3.6	406	1949 1950 1951 1952 1953 1955	1 1 1 1 1	12740 10980 10230 11330 10240 11630	3.8 3.7 3.4 3.5	475 415 376 389 357 422						
822065	40	168	10700	3.9	413	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 26 25 21 26 19 15 11 11 2		3.9 3.8 3.8 3.8 3.8 3.8	394 391 417 427 440 438 439 419 384 415 487	2	10920 11010 12400 12285 12030 13805 12943		1 3	11194 11936 11318 11549	457 429
822438	1	1	11410	3.9	440	1954	1	11410	3.9	446						
822913	2	7	12126	3.9	470	1950 1951 1952 1953 1954 1956 1959	1 1 1 1 1	14000 13400 12280 13680 17930 13680 10090	3.8 3.7 3.8 3.7 3.9	515 660 540	1	12910	485			
823710		1	12060	3.2	386	1955	1			360						
824335	2	3	12505	3.8	460	1954 1955 1956	1	15090	4.2 3.3 3.3	493						
826471	17	60	12535	3.8	478	1949 1950 1951 1952 1953 1954 1955	1 9 8 9 9	11249 12851 12068 11650 12668 12750	3.8 3.9 3.9 3.6 3.7	472 456 458 470	1	14340 12060	413	1	12590	
						1956 1957	6 2		3.6	391		13480 17350		1	14759 14225	531

TABLE 15.--OAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

283

DAUGHTER AVERAGE BY SIRE

	DAUGITIER	ATENAGE	01 311			,	ECOKD AV	ERAGE E	1 21K	E 81	FRESHENING	TEAR				
SIRE NO.	OAUGHTERS ND.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS ND.		TEST PCT.		305-DAY RECORDS	DNTEMP MILK L8.	FAT	YEARLY H RECDRDS NO.	ERD AVL MILK L8.	FAT
						1958 1959 1960	HDLS 2 3 1	13505	3.6 4.0 3.3	479 579 526	2 2 1	12160 12820 12160	427 468 437	2 3 I	12377 12379 11641	441 455 422
827033	3 30	96	11464	3.8	433	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 12 21 17 13 15 8 4 3	12595 10538 12041 11409 12077 12108 12443 15310 14347 14490	3.4 3.8 3.7 3.9 3.8 3.7 3.8 3.8 3.7	419 398 450 444 455 454 470 582 542 531		11660 13690 13030 14280 12720 16910 13460	429 518 488 532 535 632 513	1 1 1 1	12339 12350 13494 13451 13669	456 461 506 508 526
827512	2 3	5	12345	3.3	411	1953 1954 1955 1958 1959	1 1 1 1	8890 11390 12820 13820 14330	3.5 3.5 2.9 3.6 3.6	309 396 374 495 514	1	15490 15300		1	14628 15925	534 584
830269) 1	1	10760	3.6	385	1956	1	10760	3.6	385						
830593	3 2	3	8585	3.7	313	1953 1954	2	9150 7160	3.6 3.8	327 272						
830711		2	11425	3.4	388	1952 1953	1	11790 11060	3.5 3.5	388 388						
830746	5 5	14	9441	4.3	396	1947 1948 1949 1950 1951	6 3 2 2 1	9562 11677 12315 8830 7630	4.3 3.8 3.6 4.1 3.3	392 447 443 363 248						
831073	3 1	1	10960	3.5	381	1959	1	10960	3.5	381	1	12880	473	1	15663	557
831870	2	3	15263	3.7	556	1958 1959	1 2	13970 15030	3.7 3.7	521 549	1	11550	429	2	11936	445
832754		2	9755	3. 8	374	1951 1953	1	11250 8260	3.8 3.8	431 317						
833599	3	9	11242	3.7	419	1950 1951 1952 1953 1954 1955 1956	1 1 1 1 2 1	10230 10350 10890 11640 8680 10865 12640 13250	3.6 3.5 3.5 4.2 3.8 3.7 4.2 3.7	373 364 377 483 329 400 529 494						
834224	2 4,	8	11786	3.6	417	1951 1952 1953 1954 1955 1956 1958	1 1 1 1 2 1	10310 9060 9560 15390 10740 12510 11540	4.2 4.1 3.9 3.2 3.6 3.9 3.8	432 367 368 493 346 487 442						
835302	2 375	1161	11316	3.7	413	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 36 86 125 140 177 207 159 100 75 41	10947 11530 11138 11334 11280 11392 11794 11684 11926 11989 11974 11710	3.8 3.7 3.7 3.6 3.7 3.6 3.7 3.6 3.6 3.6 3.6 3.6	420 426 407 414 415 418 431 424 435 431 433 403 386	3 5 11 11	13330 13917 13638 13804 13046 13243 13353 13118 12603 11500	512 575 510 522 494 502 499 492 450 408		1 1887 12463 12344 12699 12918 10529	
83557	9 1	14	12323	3.9	478	1947 1948 1950	1 1 2	12150 12970 12085	3.8 3.9 3.9	464 505 471						
83/02	5 4	11	11112	4.1	456	1953 1954 1955 1956 1957 1958 1959	1 1 2 2 3 1	10030 8630 10015 10720 11830 9780 10220	3.6 3.5 4.7 4.3 4.0 3.4	360 298 463 465 470 337 451	1	13230	493	1	11532	437
83723	1 2	3	14965	3.8	562	1958 1959	1 2	15730 14200	3.9 3.6	607 517	1	9030 12540	320 461	2	12557	469
83758	9 1	1	13170	3.3	436	1955	1	13170	3.3	436						
83764	1 1	1	13170	3.7	488	1959	1	13170	3.7	488	1	13700	507	1	14900	540

	OAUGHTER	AVERAGE	8Y 51	RE		н	ECURO AV	cRAGE 1	BY SIR	E BY	FRESHENING					
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	SOS-DAY (RECORDS NO.		FAT	YEARLY HI RECOROS NO.		FA
							HOLS	TEIN								
839500	20	69	11899	3.5	413	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	1 3 10 15 11 9 6 5 5 3	12130 12527 11193 11814 11519 12239 12020 12752 12752 11340 10780	3.3 3.6 3.3 3.4 3.6 3.5 3.6 3.7 3.7	400 454 376 397 394 436 416 466 472 420						
842876	1	2	11595	3.3	377	1957 1958	1	11760 11430	3.2 3.3	374 379						
344122	5	9	12221	3.8	452	1956 1958 1959 1960	1 3 3 2	10650 11967 11677 14385	3.6 3.7 3.7 3.8	386 437 428 527	2 3 2	11835 12310 13120	473 463 464	1 2 3 2	9200 11680 13211 12764	33 43 49 46
844276	1	1	14900	3.7	554	1958	1	14900	3.7	554	1	14960	590			
845357	2	6	12553	3.5	433	1947 1949 1952 1953 1955	1 1 1 1 1	11550 10960 7360 17930 15760 14350		416 381 247 612 542 467						
845968	1	1	11250	3.4	382	1954	1	11250	3.4	382						
846425	2	2	9560	4.3	398	1957 1958	1	11590 7530	3.7 4.9	424 372	1	11840	504	1	11892	14
346979	8	10	12146	3.7	449	1956 1958 1959	1 3 6	11690 12333 11840	4.1 3.4 3.6	475 423 434	3	12160 11695	457 441	3 5	1 184 I 1 1862	4
347579	2	3	16473	4.0	653	1958 1959	2	15425 19330	4.0	610 816	2	15195 14190	572 546	2	13146	4
850298	2	ų	13360	3.5	466	1955 1956 1959 1960	1 1 1	10250 10420 17860 14910		347 362 628 524	1	15150 14080	565 513	}	13996 14181	5
85 10 96	27	111	11960	3.7	445	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	19 14 13 13 12 14 9 8 4 3	10599 12216 13955 12809 12378 12831 12469 13695 14623 12387	3.7 3.7	389 441 517 475 460 494 466 512 547 488 579						
354060	36	110	12800	3.8	486	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 7 17 15 19 17 11 9 7 6	11440 11426 13062 11758 12548 12431 11312 12531 12867 15732 16630	3.8 3.8 3.7 3.8 3.5	410 452 494 445 472 460 422 443 471 606 691	1 1 1 1 2 6	11460 11430 12170 11300 10140 11900 12370 13805 13870	450 458 479 433 381 446 468 519 539	2 1 1 3 6	10791 11936 10856 12081 13427 13385	449 449 440 55
354210	871	2295	12223	3.8	457	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	59 62 109 139 170 212 246 292 294 257 216 136 87	11661 11775 12081 12062 11768 12120 12301 12661 12672 12642 13048 12879 13049	3.7	436 434 453 446 433 453 473 476 475 491 482 495 518	1 7 4 15 16 25 30 51 78	13060 12819 13808 12609 12555 13150 12845 12655 12498 12581	538 481 528 473 477 495 488 479 466 470	15 25 33 41 71	12000 12331 12663 12976 12660	14 1 14 1 14 1 14 1
354298	3 1	1	9010	4.5	406	1954	1	9010	4.5	406						
354723	3 1	5	14114	3.7	520	1954 1955 1956	1 2	13730 13805 13750	3.7 3.8	514 512 519	1 2 1	12460 16570 17350	438 590 609	2	15860	4 5
066161						1957	1	15480	3.5	542	1	13310	480	1	14911	5

1953 1956 1957

1 14110 3.3 460 1 14810 3.4 505 1 15550 3.3 513

855351 1 3 14823 3.3 493

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAUGHTER	AVERAGE	8Y S1	RE		R	ECORO AVI	ERAGE	BY SIR	E 8¥	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-OAY (RECOROS NO.	MILK	. AV. FAT L8.	YEARLY HE RECORDS NO.	MILK	
							HOLS				1100		200	140 2		2
857269	8	21	11708	3.6	426	1952 1953 1954 1955 1956 1957	1 4 5 3 3 2	5960 10485 12128 9560 14323 13910	3.5 3.6 3.6 3.6	234 363 421 344 516 496						
						1958 1959	1	13380 16640	3.8 4.2	506 699	1	14000	577	1	13472	544
857489		1	14090	3.7	518	1958	1	14090	3.7	518						
857502		1 8	13720	3.4	464	1959	1	13720	3.4	464	1	14980	532	1	15456	584
858418	6	8	11932	3.5	417	1954 1956 1957 1958	1 2 2 3	11820 12755 11630 12937		416 411 399 458	1	11590	428	1	11031	408
858839	1	1	11350	3.4	390	1955	1	11350	3.4	390						
859238	3 1	1	9140	3.2	288	1959	1	9140	3.2	288	1	10590	366	1	11303	399
861104		1	14130	3.7	519	1955	1	14130	3.7	519						
862248	3 4	ł	11870	3.6	425	1954 1956 1959 1960	1 1 1	7440 11410 14110 14520	3.4	283 385 540 493	1	11320 16250	425 600	1	11696 13156	432 508
864818	3 1	1	11000	3.9	434	1956	1	11000	3.9	434						
865323	3 22	28	12100	3.8	453	1957 1958 1959 1960	6 9 10 3	13183 11383 12311 11243	3.9 3.7	504 440 453 401		15370 12633 11967 12190	582 462 440 438	1 4 7 3	14770 13285 12110 12055	547 484 449 440
865513	3 117	208	11954	3.8	454	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 1 2 2 2 12 39 39 33 34 40 3	10140 12600 11750 11385 13320 11816 11305 11394 11618 11831 13103	4.0 3.8 3.8 4.2 3.6 3.9 3.8 3.9 3.8	410 500 446 429 546 429 436 430 448 452 489 602	1 2 3 7 18 38 38	14870 12105 12723 12740 13015 12893 15063	533 465 448 467 487 479 572	5 9 8 16 33 2	12226 12287 11455 12248 12731 12770	456 460 433 459 472 504
866063	3 1	2	12080	3.6	428	1953 1954	1	10280 13880		360 496						
866139	8	31	10796	3.6	392	1947 1948 1949 1950 1951 1952 1953 1955	10 5 4 4 2 2 3	10304 10986 12645 11753 9570 12820 12557 12340	3.8 3.7 3.5 3.4 3.2 3.2	373 415 467 407 323 404 401 383						
866146	5 1	5	12470	3.1	381	1952 1953 1954 1955 1956	1 1 1 1	13130 14070 12180 11070 11900	3.1 3.2 2.9	393 431 388 324 367						
866148	3 120	318	12067	3.6	433	1952 1953 1954 1955 1956 1957 1958 1959 1960	6 64 71 52 49 36 27	11983 12081 12417 12342 12798 12945 12806 12223 9530	3.6 3.6 3.6 3.5 3.5 3.7	420 430 452 445 459 459 453 449	2 5 6 7 8 8 10	13280 13758 13020 12763 13623 12911 11658 8400	491 524 512 489 515 466 436 365	6 9 9 9 8 2	12731 12994 12822 12738 12501 10377	466 482 485 467 467 404
867135	5 2	5	12503	3.4	428	1953 1954 1955 1957 1958	1 1 1 1	14100 17030 9880 14180 15190	3.5 3.2 3.5	517 600 315 492 549	1 1	10860 14450 13580 12990	410 519 532 520	1	12099	467
867412	2 1	1	14960	3.9	590	1958	1	14960	3.9	590	1	14900	554			
867523	3 162	625	12026	3.6	437	1948 1949 1950 1951 1952 1953	5 31 82 90 89 87 76	11554 11339 11675 11898 11939 12258 12951	3.7 3.7 3.7 3.7 3.7	425 413 431 436 436 449 471	1 2 1 3 3	10410 11870 11190 11383 12647	378 431 449 420 483			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRL

												COMP. NO.		W. 404		
SIRE NO.	DAUGHTERS NO.	RECORDS NO.	MILK LB.		FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	RECORDS NO.			YEARLY HE RECOROS NO.	MILK	
						1955 1956 1957 1958 1959		TEIN 12740 12902 13331 13137 11168	3.6 3.6 3.6 3.6 3.4	465 462 478 469 382	4 6 6 9 2	12823 12902 12815 12799 10705	492 475 461 482 385	4 4 6 7 2	13017 13516 12016 12742 10715	495 497 457 482 389
867648	3 1	1	11450	3.5	396	1959	1	11450	3.5	396	1	11320	419	1	13483	504
869473	3 27	81	12113	3.8	45/	1951 1952 1953 1954 1955 1956 1957 1958 1959	3 6 13 15 12 14 9 7	14460 12900 11433 11507 12874 12449 13294 13187 12020		557 492 437 428 487 467 513 520 444	2 1 1 1 3 2	13485 12710 13210 15140 12783 12625	500 472 493 587 499 496	2 1 2 4 2	11298 11020 12710 12966 12137	445 452 500 502 468
87 03 02	2 57	178	12155	3.5	429	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	21 25 30 32 21 18 14 8 2	12623 12181 12608 12167 12303 13309 14113 10832 11486 11905 13397	3.6 3.5 3.6 3.6 3.5 3.4 3.4 3.4	449 425 430 423 439 474 488 371 384 394 478	1	10950	411	1 1 3	11652 11391 12165	417 405 444
870736	3	5	14441	3.7	527	1956	1	14970	4.0	603				1	13113	482
						1957 1958	3 1	14537 12010	3.7 4.3	530 517	1	12300 11760	435 393	1 1	12993 12993	467 474
872234	+ 1	1	15860	3.1	490	1959	1	15860	3.1	490	1	12990	493	1	13331	494
872422	2 1	2	14970	3.6	539	1955 1956	1	16160 13780	3.7 3.5	590 487						
876262	2 1	4	13000	3.6	470	1949 1950 1951 1952	1 1 1	16330 11190 11160 13320	3.9 3.5 3.4 3.6	635 388 374 482						
876822	2 1	3	11390	3.4	386	1952 1954 1955	1 1 1	13100 11870 9200	3.6 3.3 3.2	472 396 290						
87930	9 24	43	11348	3.8	429	1955 1956 1957 1958 1959 1960	6 8 4 8 14 3	9418 11675 11980 11616 11463 11950	3.9 3.9 3.9 3.8 3.7	365 455 460 444 424 439	1 2 3 11 3	14850 13505 12117 11618 11450	579 508 444 425 421	1 1 3 11 3	13113 9886 11627 11410 10969	500 376 431 420 405
880216	2	4	10065	3.8	376	1956 1957 1958	1 2 1	14110 8070 14860	3.7 3.9 3.5	525 310 523						
88072	3 3	l4	10378	4.4	449	1953 1954 1958	1 1 2	8350 10780 10785	# • # # • P	366 493 459						
881376	5 121	240	11818	3.9	458	1947 1948 1950 1953 1954 1955 1956 1957 1958 1959	1 1 11 35 39 46 44 30 27	13100 10110 13720 11996 11395 12121 11918 12260 12185 12668 12496	4.0 3.9 3.9 3.8	512 402 544 468 445 482 470 482 466 475 473		12880 12700 11970 13662 13397 12864 12935 13015	492	10 8 10 24 4	12451 12173 11880 11640 12802 13061	
88137	7 1	1	12180	3.7	451	1954	1	12180	3.7	451						
88293	1 4	5	14078	3.4	483	1957 1958 1959 1960	1 2 1	13560 13685 14790 14990		435 461 548 519	1 1 1 1	12190 12860 12900 12770	443 464 486 429	1 1 1	12927 14279 12088	
88428	5 1	1	14380	3.7	527	1956	1	14380	3.7	527						
88433	4 45	123	11031	3.9	428	1951 1952 1953 1954 1955 1956 1957	1 30 25 21 17 9 6	11290 10162 10610 11808 12009 12290 12420	3.6 3.9 3.9 3.8 3.8 3.8	406 401 412 454 461 466 511	1 1 1	11180 11460 11660 13410	465 478 468 531	1 1 1	12993 14519 13080	476 543 488

287

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

MOEE 13.			HENING	RECO	RDS FRO	DM THIS	STATE ONL	Υ			FRESHENING		J. UK	-24		
											305-DAY (CONTEMP	. Av.	YLARLY H	ERO AVE	RAJE
SIRE NO.	DAUGHTERS NO.	NO.	MILK L8.	PCT.	FAT L8.	FRESH YEAR	NO. HOLST	F8.	PCI.	FAT L8.	RECURDS NO.	MILK Lo.	FAT	RLCOROS NO.	MILK LB.	F A T
						1958 1959	6 8	13057 13389	3.9	518		14255 13962	556 523	2 5	12797 13117	
884838	55	81	11858	3.9	453	1955 1956 1957 1958 1959 1960	16	9863 10768 11743 11604 13362 12980	3.9 3.7 3.0 3.9	376 413 438 440 516 514	8 17	14110 13463 11905 13519 12302	442	2 5 6 14 4	11478 12775 12194 12509 12222	412 476 456 472 451
885830	3	4	10112	3.6	367	1959 1960	3	10530 7660		385 284		10953 12770		3 1	11703 13211	
887814	. 4	7	10106	3.8	381	1952 1953 1954 1955]] !4	8410 11230 9165 11390	3.9 3.9	314 437 350 391						
888593	1	5	14910	3.6	540	1953 1954 1955 1956 1958	1 1 1 1	13520 15690 15450 15550 14340								
888689	ц.	6	14611	4.0	579	1956 1957 1958 1959 1960	1	11080 12270 12330 17240 12070	3.8 3.6 3.8 4.5	421 470 440 663 545	2 1	15725 10830	612	2 1	13865 11543	
889312	1	1	8790	3.6	318	1959	1	8790	3.6	318	1	11640	436	1	11532	437
890181	17	25	11134	4.0	435	1958 1959 1960	9 14 2	11128 10850 13520	4.0	438 431 468		11901 12270 12005	450	13	12738 11975 11205	443
890281	1	3	14060	3.2	450	1953 1954 1955		12100 13130 16950	3.2 3.0 3.5	392 397 560						
890463	3	ц	9587	3.8	360	1957 1958 1959 1960	1 1 1	12110 9930 5370 9000	3.7	494 363 182 331	1	13630 13110 12120	488	1	11042 13178 10028	494
891636	, ц	10	10253	3.8	391	1951 1952 1953 1954 1955 1958 1959		10900 10950 11360 10010 10230 10017 12200	4.0 3.9 3.9			13080 13420			13146 13963	
892877	1	3	12087	3.5	423	1952 1953 1955	 	12280 12500 11480	3.5	447 435 387						
893550	42	129	11519	3.9	442	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	30 20 23 11 8 8	10661 11366 11715 11718 11875 12347 13128 12180 14027 11893	4.0 3.8 3.8 3.8 3.9 3.9	443 455 486 514 471	1 1 1 1 2	14110 12970 12600 13860 13980 12890 12507	486 457 514 520 508	1 2	12339 12350 13473 12726	461 519
895914	1	1	9640	2.9	284	1958	1	9640	2.9	284						
896304	1	2	13530	3.6	48∠	1949 1950	1	13850 13210		519 444						
896853	1	1	13100	3.7	480	1959	1	13100	3.7	480	1	9820	350	1	11500	419
898193	š 76	217	11996	3.6	427	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	8 22 34 40 34 29 22 11 8 5	11763 11837 11768 11584 12752 11920 12207 14392 14109 13288 14955	3.6 3.7 3.6 3.5 3.5 3.7 3.4 3.5	415 427 427 421 448 416 444 492 492 453 497	1 1 1 1 3	10350 10340 10720 12040 10420 12543		1	12862 12938 12666	
899573	3 10	29	11550	3.8	432	1947 1948 1949 1950 1951 1952 1953 1954 1955	1 6 5 3 4 3 2 1	10600 8600 10187 11904 12958 11787 15035 13270 15660	3.6 3.7 3.8 3.8 4.0 4.0	427 328 389 439 495 482 464 577 477	1 1 1	10560 13470 17570 13250 15430	514 705 512		10431 10344	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUGHTERS NO.	RECUROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY (RECOROS NO.			YEARLY HI RECOROS NO.		FAT
						1957 1958	HOLS 1 1	TEIN 17550 16360	3.8 3.4	662 559	1	12660 11840	468 432	1	9821 11739	396 461
90027	4 9	11	12044	3.7	449	1958 1959 1960	1 8 2	14520 11873 11450	3.8 3.7 3.9	547 439 448	1 8 2	13300 12194 12690	490 445 464	1 4 2	11042 12244 11500	402 456 434
90144	5 3	6	12489	3.7	459	1951 1952 1953 1956 1957 1958	1 1 1 1	12850 12510 4540 13830 14820 12520	3.9 4.1 3.7 3.8 3.3 3.4	502 510 166 521 492 431						
90250	1 1	1	13480	3.4	458	1957	1	13480	3.4	458	1	12790	482	1	13309	530
90255	1 1	2	12310	3.7	454	1952 1953	1	10280 14340	3.7 3.7	378 529						
90291	5 5	8	12453	3.6	447	1954 1955 1956 1957 1958 1959	1 1 1 1 2 2	10110 13300 12950 15520 13440 13100	3.9 3.3 3.4 3.3 3.5 3.7	392 434 443 516 472 475	1 1 2 2	10250 12890 10685 12755	391 470 394 479	1 1 1 2 2	12034 13581 12579 11636 12454	425 485 453 424 467
90353	7 1	1	18430	3.0	560	1959	1	18430	3.0	560	1	15490	581	1	13015	471
90422	0 1	1	12170	3.8	466	1959	1	12170	3.8	466	1	12820	482	1	13178	494
90489	1 1	1	13370	3.2	423	1957	1	13370	3.2	423						
90568.	3 1	2	13865	3.9	533	1958 1959	1	14040 13690	3.6 4.1	512 554	1	12670 14040	471 527	1	13156 13560	509 513
90600	0 15	25	10925	3.9	421	1954 1955 1956 1957 1958 1959 1960	1 2 3 4 4 10	945,0 7755 10153 14008 11060 10446 11550	3.6 3.7 4.1 3.9 4.2 3.8 4.2	338 287 418 535 463 397 487	2 9	10580 12496	396 453	2 8	10802 11512	#0# #2#
90922	9 2	2	15615	3.7	566	1957 1959	1	19480 11750	3.6 3.7	697 434	;	14660	541 514	1	12633 14214	472 534
91002	7 138	345	11426	4.0	457	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	12 11 11 11 10 40 71 59 55 35 24	11678 11980 11727 13437 14599 12079 11803 11412 11820 12461 11655 12062	4.1 4.2 4.2 4.1 4.1 3.9 4.0 4.0 4.1	478 498 487 549 599 474 472 452 479 493 454	1 1 8 10 10 16 20 22 6	10960 12870 14018 13104 13242 12336 13404 12608 11840	420 457 516 490 506 461 502 475 439	8 8 14 19 22 6	13318 13344 12392 13097 12452 11816	500 498 477 489 463 423
91002	9 72	157	11598	3.8	433	1952 1953 1954 1955 1956 1957 1958 1959	1 18 28 34 24 25 18 6	12200 11496 11123 11377 11373 11944 12280 11627 13977		479 428 430 428 434 439 462 435 507	2 1 2 4 6 8 5 3	13600 16750 12855 14155 11973 13338 13070 12643	499 618 480 510 436 496 498 474	4 5 6 8 5 2	11323 11473 11015 12237 11957 11767	419 430 411 460 453 447
9 <u>1</u> 04 4	8 50	108	12649	3.6	449	1953 1954 1955 1956 1957 1958 1959	9 25 22 21 16 9 3	12411 13255 12901 13069 13943 14167 13343 14457	3.5	427 471 457 467 485 502 470 516	2 3 4 6 3 3 3	11895 12047 13073 13443 12957 13020 13693	403 454 495 537 507 477 517	2 4 5 3 3	13832 12590 11513 11901 11834 14603	517 485 445 461 452 534
91063	0 1	1	16870	3.3	557	1959	1	16870	3.3	557	1	11510	419	1	11979	435
91077	4 607	1110	11910	3.8	452	1951 1952 1953 1954 1955 1956 1957 1958 1959	26 54 80 114 145 134 137 164 215	12493 12136 11808 11594 11747 11997 12000 12045 12117 11927	3.8 3.8 3.8	470 460 446 442 446 456 454 453 461 459	2 3 6 9 14 27 72 197 38	13755 11293 13663 13422 13137 13444 12573 12409 12655	503 442 510 497 493 499 466 463 479	8 16 26 65 174 32	12458 12244 12403 12471 12234 12571	470 464 470 465 458 471
91181	0 1	1	10530	3.3	352	1952	1	10530	3.3	352						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY 511	RE		R	ECORO AV	ERAGE 8	BY 51K	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		1 c S T P C T •	FAT L8.	FRESH YEAR	RECOROS NO.		1EST PCT.		305-DAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.	MILK	
							HOL S	TEIN								
913381	104	267	11506	3.5	406	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 18 21 43 46 37 29 23 16 10	11677 11804 11447 11676 11938 11891 11473 11523 12078 12392 12210 10324	3.5 3.6 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	405 423 404 419 419 418 400 396 418 432 406 355	1 2 2 3 2 2 10 10 5	13510 12710 12310 14010 13010 13215 11748 12101 11920	427 430 432 491 475 471 421 436 442	1 8	11958 10453 12259 12242 12683	422 367 443 443 468
913988	3 1	1	10530	4.2	438	1958	1	10530	4.2	438						
914050	1	1	15890	3.8	599	1957	1	15890	3.8	599						
915645	1	1	124/0	4.1	506	1952	1	12470	4.1	506						
915811	1	4	16740	3.8	628	1955 1956 1957 1958	1 1 1	17980 14890 19090 15000	3.6 3.7 4.0 3.7	649 545 767 550						
916471	1	1	7120	3.7	260	1954	1	7120	3.7	266						
919608	7	11	12345	3.8	470	1955 1956 1957 1958 1959	3 3 1 1	12090 13480 12987 13760 9670	3.8 4.1 3.8 3.3	457 519 532 528 315	1	12720 13520 14790 12910 10200	495 523 545 504 374	1 1 1 1	14246 12895 13091 14105 9690	529 496 507 541 365
920869	ī	31	12967	3.6	466	1952 1953 1954 1955 1956 1957 1958	2 4 5 8 4 4	11365 12778 12906 13901 13193 12580 13913	3.6 3.6 3.6 3.7 3.7 3.6 3.6	408 462 455 507 489 438 493						
923209	1	1	7470	3.7	274	1958	1	7470	3.7	274						
923314	4	6	12554	4.0	504	1958 1959	3 3	11757 13903	4.0	464 577	2 3	13620 12177	529 471	2 3	12813 12906	480 488
923318	252	486	12129	3.7	446	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 12 47 60 66 84 77 59 45	11540 12667 11652 12383 12404 12006 12264 12429 12234 12112	3.4 3.7 3.7 3.8 3.7 3.7 3.7 3.7 3.6 3.6	390 472 432 464 463 442 453 457 446	2 7 9 8 16 29 41	13895 13566 13938 13256 11965 12434 12829 13272	489 507 529 493 451 464 472 489	8 7 12 26 40	12081 11806 11034 11788 12456 12620	453 453 413 438 461 472
924105	1	1	12060	3.2	384	1959	1	12060	3.2	384	1	10440	374	1	10431	384
924564	3	7	13603	4.1	546	1955 1956 1957 1958 1959	1 2 1 2	15060 13290 15200 13370 16040	3.6 4.1 3.6 4.0 3.9	544 531 548 523 620	1	11450 12810	419 472	1 1	11423 12426	422 465
926363	2	6	12794	3.8	482	1955 1957 1958 1959	1 1 3 1	13020 11840 12513 14360	3.7	506 478 465 509		13340 13230			11042 12993	
927472	! !	2	9620	4.0	383	1953 1955	1 1	9810 9430	4.1 3.9	402 364						
929962	5	12	11993	3.5	431	1952 1953 1954 1955 1956 1957 1958 1959	1 2 2 1 1 1 2 2	13780 11035 9475 12320 13080 13160 13730 12405	3.3 3.2 3.3 3.5 3.8	435 373 315 400 428 455 528 443		12840 12220			11342 13080	
931107	1	1	10130	4.3	431	1953	ı	10130	4.3	431						
931159	1	1	100/0	3.4	343	1954	1	10070	3.4	343						
931840	2	2	15085	3.9	587	1957 1958	1	13530 16640	3.8 4.0	5 15 658						
933248	1	3	16033	4.2	667	1954 1957 1958	1 1 1	17890 16640 13570	4.5	738 710 552	1 1	13840 13080			15598 13876	
933930	753	14 18	12039	3.7	447	1951 1952 1953		12192 12085 11486	3.6		1 1 4	11500 12930 12915				

TABLE 15.--OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED.

	OAUGHTER	AVERAGE	BY 51	RE		к	ECORD AVI	ERAGE &	BY SIR	E BY	FRESHENT NG	YEAR				
SIRE NO.	OAUGHTERS NO.	KECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAK	RECOROS NO.		TEST PCT.	FAT LB.	305-0AY RECORDS			YEARLY HI RECOROS NO.		FAT
						1954 1955 1956 1957 1958 1959	HOLS 136 231 220 203 185 238 63	12205 12059 11966 12432 12073 12256 12581		448 450 445 465 450 456 471	11 21 25 29 90 201	12730 13240 13496 12978 12388 12489 12089	180 511 505 498 467 464 454	21 29 32 86 186 51	12520 13140 12516 11927 12281 12357	467 495 470 449 458 464
934577	7 7	7	14280	3.6	529	1960	7	14280	3.6	529	5	11880	504	5	12775	504
936/16	5 5	12	10256	3.4	343	1953 1954 1955 1957	ц З ц 1	9525 10710 11473 11380	3.2	320 365 370 354						
938031	4 2	14	13125	3.7	478	1956 1957 1958 1959	1 1 1	15020 15830 11610 10040	3.7 3.4	559 589 391 371						
938770	0 1	2	8735	4.0	347	1955 1956	1	8770 8700		332 361						
94 17 80	0 3	5	11595	3.7	419	1957 1958 1959	1 2 2	13880 10920 11105	3.7	497 397 405	1 2	11630 11620	431 414	1	11336 12426	
943293	3 2	3	13998	3.9	542	1957 1958	2	15020 13690		558 548						
943749	9 2	2	7790	4.1	312	1959	2	7790	4.1	312	2	11285	433	2	12274	467
943799	9 2	2	10345	4.0	413	1959 1960	1	7800 12890		309 516	1	11570 12760	415 477	1	10573	390
946403	3 2	2	13760	3.7	504	1958 1959	1 1	12540 14980		463 544	1	13620	505	1	14900	540
947319	9 1	5	12728	4.0	510	1953 1954 1955 1957 1958	1 1 1 1	12040 13460 12690 14400 11050	4.2 3.8 3.8	541 559 486 541 424						
94 9 091	4 1	4	9843	3.8	369	1954 1955 1956 1957	1 1 1 3	10730 10220 8970 9450	3.9 3.7	403 396 334 343						
949139	9 164	230	12342	3.7	460	1954 1955 1956 1957 1958 1959	12 16 23 45 104 26	13280 12528 11654 12438 12054 12261 13230	3.7 3.7 3.8	492 466 430 466 442 456 496	1 4 26 100 25	14310 13723 12178 121d2 12266	523 504 447 453 448	4 25 88 23	12118 11920 12090 12230	449 446 447
949150	6 1	1	10280	3.3	336	1959	1	10280	3.3	336	1	11350	420	1	12557	464
949159	9 5	5	12758	3.7	473	1959 1960	1	13395 10210		495 388	1	12240 12250	448 460	4 1	12609 14017	464 514
950311	4 2	2	10480	3.7	383	1955 1960	1	11510 9450		448 318	1	13700	493	1	12862	483
95125	3 1	2	8425	4.0	334	1952 1953	1		3.7 4.2	335 332						
952029	9 7	9	12916	3.6	466	1958 1959	3 6	12557 13438		434 490		10523 12125		3 6	11565 12099	
95242	1 2	3	6233	3.6	224	1953 1958	2	6345 6120		221 226	1	10750	403	1	9418	393
953320	6 43	160	12904	3.9	497	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	7 12 13 15 27 28 22 18 15 2	13046 12986 12105 12663 12773 13375 12978 12856 12803 11815	3.7 3.9 3.8 3.9 3.6 3.9 4.0 3.9 3.6	500 487 469 486 500 513 504 501 425 604	1 2 6 7 5	14120 11755 12718 13076 13262 12/30	473 488 530 530	7 6 7 6 1	12576 12856 12599 12490 12491	491 486 485
95446	1 4	5	11570	3.7	438	1957 1958 1959	1 2 2	12760 9975 13190	3.5	467 355 547	1 2	13370 14300		1 2	11042 12879	
95549.	3 35	48	12176	3.8	464	1955 1956 1957 1958 1959 1960	2 5 9 4 18 5	11263 12246 13491	4.0	522 468 416 476 508 454	4 16 5	12/65 13188 13002	486	3 16 5	11798 12780 13228	474

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE 1. ARTIFICIAL BRELLING ORGANIZATIONS--GROUPED BY BREED. BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

							STATE ON									
	UAUGHTER	AVERAGE	84 21	KL		н	ECORD AV	ERAGE	51		FKLSHENTNU					
SIRE NO.	OAUGHTERS NO.	RELORDS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAK	RECOROS	MILK E8.	TEST PCT.	FAT LS.	RECUROS	MILK Lb.	FAI LE.	YLARLY HI RLCOKDS NO.	MILK LB.	FAT L:
							HUL 2	TelN								
95561	9 5	7	14803	3.8	564	1957 1958 1959	3	13515 13080 16075	3.7	481 661	3	13020 12090 13740	454 458 503	3	10213 12470 12503	403
95608	3	Ь	12923	5.8	493	1955 1957 1958 1959	2	13840 13145 13970 12330	3.8 3.0	517 496 521 490	1 2	10150 10850 12400 13140	451		11576 12377 12263 14497	446
957410	5 94	232	10984	3.7	406	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	12 22 48 39 29 32 18 12 7 8	11483 9699 11075 11214 11611 11621 11733 12099 12867 11529 10741 8780	3.5 3.7 3.7 3.7 3.7 3.6 3.7 3.6 3.6	428 572 593 417 422 433 434 450 469 412 585 503	1	15820 14120 12650 14170 14860 11240 10793 8780	548 569 459	1 1 2 5	13058 14007 10927 10379 11020	472 534 417 384 428
95912	1 2	2	10620	4.0	418	1959	٤	10620	4.0	418	2	11540	433	2	12519	462
96342	2 1	2	18190	3.5	633	1958 1959) I	17620 18560		630 636	1	11170 14460	432 527	1	12066 13047	450 484
965059	9 1	2	13190	4.4	571	1958 1960	1	13950 12430		621 520	1	12070	506	1	11369	436
96055	1 42	105	9540	3.8	372	1950 1951 1952 1953 1954 1955 1956	21 17	13005 10752 10633 10419 11723 11365 10302	3.8 3.7 3.8 4.1 3.6		1	13790 10740 15440		1	11129 9330	361
						1957 1958 1959 1960	5 13 3	8720 7793	3.9 3.7 3.5	455 268 319 276	11	10330 11550 11464 11220	360 401 410 400	2 11	11551 10666 11234 10802	397
96636	2 3	5	8612	3.6	307	1956 1957 1959 1960	1 2 1	1360 8640 10850 12160	3.6 3.4	52 311 374 425		125±0 13420	40 l 494		13680 12993	
96647	0 1	2	12895	3.7	470	1955 1956	1	17230 8560		632 319						
96647	1 1	1	8510	3.5	294	1959	1	8510	3.5	294	1	8660	339	1	9516	352
966971	8 7	18	11387	3.6	410	1951 1952 1953 1954 1955 1956 1957	4 3 2 2 1	12480 10525 11150 9945 11170 9780 11473	3.8 3.5 3.4 3.8 3.5 3.5		1	11340	395	1	10660	378
96787.	3 15	18	14600	3.5	510	1957 1958 1959 1960	12	13685 16617 14329 13820	3.5 3.5		12	12980 12347 11310	457	7	11810 11931 10028	
96854	4 6	10	11210	4.1	453	1956 1957 1958 1959	5 2 2 1	9888 12615 14665 16440	4.2 3.9	407 520 570 609	1	14980 15100	533 552	1	14628 15925	554 584
96878	6 1	1	13850	3.5	485	1959	1	13850	3.5	485	1	13670	50ช	1	14900	540
96921	1 4	16	12086	3.6	435	1951	3	11797		434						
						1952 1953 1954 1955 1956 1957	3 3 2 1	11750 12477 12303 12800 12060 11540	3.6 3.5 3.6 3.6	428 444 432 456 437 393) 	9886 11064 10159	384 423 396
96966	7 17	24	12587	3.8	482	1955 1956 1957 1958 1959 1960	1 3 2 6 10 2	12810 12783 11130 12158 12615 15975	4.0 4.4 3.9 3.8	496 511 465 475 483 568	1 1 4 10 2	13640 17320 12588 12949 13970	506 668 469 487 501	1 1 1 2 9	14246 12895 13091 13020 12872 13080	507 495 483
96966	9 13	15	13168	3.7	488	1956 1957 1958	1 2 3	17350 12600 12013		653 498 426	2	11220	402	2	10726	386

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPLD BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	OAUGHTER	AVERAGE	8Y S1	RE		R	LCORD AVE	RAGE 8	Y SIR	E 8Y	FRESHENING	YEAR				
SIRL NO.	DAUGHTERS NO.	RECOROS NO.			FAT L8.	FRESH YEAR	RECORDS NO.				305-DAY (RECOROS NO.			YEARLY HI RECORDS NO.		FAT
						1959 1960		LIN 13591 13685	3.7 3.5	569 481	7 1	11869 15470	438 567	7	12650 15391	461 549
972497	7 17	45	11710	3.7	43 4	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 1 7 9 10 7 3 2 3	12550 9360 11220 11634 10712 11323 12377 13455 12830 15065	3.7 3.6 3.7 3.7 3.8 3.7 3.7 3.7	470 333 414 438 410 416 462 489 482 551	3 2	12657 3700	473 190	2	12012	1 1118
972498	3 6	24	12103	3.7	450	1951 1952 1953 1954 1955 1956 1957	3 5 2 4 4 2 3	13553 10754 14295 13998 14210 13200 13100 11670	4.1 3.8 3.5 3.7 3.8 3.8 3.7 3.6	558 404 503 513 534 505 482 418						
972712	2 1	1	14490	3.6	517	1959	1	14490	3.6	517	1	14570	559	1	14170	536
973471	, 3	8	11174	3.9	428	1954 1955 1956 1957	1 3 3 1	8720 11247 11030 15290	4.1 3.9 3.8 3.6	361 438 421 547						
975137	7 9	15	12415	3.6	445	1956 1957 1958 1959 1960	1 2 5 6 1	14680 14395 12884 11480 13310	3.7 3.6 3.8 3.6 3.1	550 523 490 408 410	1 1 3 6	10910 11570 12747 12353 13810	422 488 422 450 515	4 4 1	12917 13015 13636	469 476 509
975683	3 25	32	11983	3.8	452	1955 1956 1957 1958 1959	3 2 6 6 14 1	10637 14615 11447 12807 12064 12530	3.7 3.8 3.8 3.7 3.8 3.6	393 547 424 469 460 445	1 1 2 5 14	13220 12830 13585 13844 12608 10920	522 517 489 493 475 412	1 1 2 5 14	14246 12895 12661 12302 12358 11543	529 496 479 478 463 461
975893	3 1	1	12350	3.6	445	1959	1	12350	3.6	445	1	9750	352			
976472	2 1	3	1.3083	3.7	480	1956 1957 1958	1 1 1	12530 13080 13640	3.6 3.7 3.7	447 469 504						
977110) 16	28	12785	3.9	490	1955 1956 1957 1958 1959 1960	1 4 7 9 3	12020 11090 12253 12296 13946 12250	3.9 3.7 3.9 3.9 3.9	469 422 449 473 537 471	1 1 6 9	15350 13460 14660 11802 13836 12680	566 514 527 437 530 469	1 1 3 8 3	14355 14257 14770 13222 13757 12589	483 492 547 485 525 480
978750	32	43	11865	3.8	455	1955 1956 1957	3 7 7	10363 11916 11456	3.9 3.9 3.9	402 468 451	1	11650	421			
						1956 1959 1960	10 13 3	12188 11985 13487	3.8 3.8 3.8	457 459 535	3 13 3	10827 12938 13373	405 487 521	3 12 3	11176 12833 12404	415 488 475
980008	3 3	14	13807	3.6	501	1959	4	13880	3.7	513	3	13113	482	3	12260	456
980066	5 1	2	14615	4.4	640	1954 1955	1	14230 15000	4.2 4.6	593 68 7						
981308	3 4	i.	12860	3.5	455	1959	4	12860	3.5	455	4	11353	440	4	11726	454
983739	> 55	114	11753	3.6	423	1953 1954 1955 1956 1957 1958 1959	1 22 28 22 17 13 7 2	9230 11094 11566 12239 11836 12058 13720 10055	3.3 3.6 3.6 3.0 3.0 3.5 3.7	308 396 417 444 425 423 513 375	1 1 3 1 0 8 7 2	7870 12150 13490 13000 12462 12553 12741 11485	252 387 452 504 428 477 468 430	4 3 6 7 6 2	10560 10758 10406 11875 11872 12067	399 417 387 458 448 451
984799	9 20	25	12624	5.7	464	1957 1958 1959 1960	1 4 15 5	14270 12058 11961 13810	3.8 3.6 3.3 3.7	547 431 447 508	1 3 15 5	13530 13633 12081 12990	503 503 445 475	1 2 12 5	12666 13124 11918 12605	475 479 440 462
98480	1	2	14135	3.6	510	1954 1956	1	14740 13530	3.4 3.8	08د ۱۱د						
986239	9 1	1	12970	3.3	426	1360	1	12990	3.3	426	1	12330	4 14			
989939	9 167	203	12155	4.2	506	1957 1958 1959 1960	1 38 135 29	9790 10913 12342 12126	4.2 4.2 4.2 4.3	412 457 511 515	27 125 24	12459 12722 13836	470 478 528	25 122 23	11960 12667 12722	447 479 480

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	BY 51	RŁ		R.	ECORD AV	LRAGE 8	BY SIR	£ 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-DAY (RECURDS NO.		FAT	YEARLY HI RECOROS NO.		FAT
							HOLS	TEIN								
991741	1	1	14160	3.5	502	1957	1	14160	3.5	502						
992370		1	13300	4.1	544	1959	1	13300	4 - 1	544	H.	7880	385	1	9875	443
992792	. 8	18	10848	3.9	416	1951 1952 1953 1954 1955	1 3 4 4 2	10980 11077 10728 11080 11445	4.0 3.7 4.1 3.9 3.5	438 413 430 431 404	1	13620 10920	570 456	1	12993	508
						1956 1957 1958	1 2 1	11080 12425 9520	3.6 3.5 3.6	400 435 340				1	12295	475
993764	14	15	11261	3.6	406	1956 1957 1958 1959 1960	1 2 1 10	6490 9870 11070 12113 11500	3.6 3.6 3.8 3.6 3.1	233 358 425 443 359		10910 12084 12010	447 454 436	1 6 1	1 1946 11996 10028	471 447 377
997481	25	33	11265	3.7	415	1956	6	11842	3.9	455	2	11760	460	,	10682	401
						1957 1958 1959 1960	5 7 11 4	11996 11584 10407 11230	3.7 3.6 3.7 3.7	445 418 382 414	1 4	14710 13325 12885 8618	539 474 466 313	3 11	10838 12353 13026	404 446
999938	258	435	11695	3.6	425	1951 1952	10 29	10239 11580	3.6 3.7	368 428	1	9730	347			
						1953 1954 1955 1956 1957 1958 1959 1960	33 45 47 34 18 62 126 31	11308 11561 11264 11553 11941 11896 11990	3.6 3.7 3.7 3.7 3.6 3.6 3.7	411 419 418 423 442 433 433 420	1 2 2 6 4 42 115 26	13120 13650 12865 14338 13405 12487 12155 11925	491 477 478 531 509 457 448 438	1 5 2 34 108 24	12339 11814 12688 12116 12013 12084	456 437 461 447 443
1000390	7	8	13148	3.9	512	1958 1959 1960	1 6 1	13940 12968 12440	3.6 4.0 3.5	506 516 431	 	11720 12060 11970	417 449 418	1 4 1	12699 12157 11445	462 457 419
1001512	9	11	11138	3.9	429	1958 1959	5 6	10600 11380	3.9 3.9	407 449	2	13920 14308	510 513	2	14470 12775	540 466
1002177	2	5	10612	3.9	416	1953 1954 1955 1958 1959	1 1 1 1	10040 9800 12600 9970 10850	4.0 4.1 4.3 3.5 3.8	406 400 548 349 410	1	10680 10980	401 422	1	9418 10987	
1003598	5	6	11769	3.8	447	1956 1957 1958 1959 1960	1 2 1 1	6860 12585 11490 11330 16660	4.2 3.8 3.6 3.9 3.6	289 471 415 442 601	1	10650 16500	397 590	1	11064 16143	414 582
1004144	1	2	10395	3.6	372	1959 1960	1	8650 12140	3.5 3.6	306 438	1	11070 14570	390 519	1	10922 11685	398 423
1004232	Ś	6	11962	3-8	457	1957 1959 1960	1 4	9260 12950 9620	3.6 3.9 3.9	334 202 379	4	11830	429 379	2	12644	460
1004259	47	92	11066	3.6	390	1952 1953 1954 1955 1956 1957 1958 1959	3 8 17 16 8 13 10	12730 12328 10736 11199 11798 12525 11616		437 424 384 404 392 443 408 383	ц 12	11700 11188	421 404	4 12	12699 11133	462 406
						1960	5	10998	3.4	379	5	11880	434	5	11772	433
1005575	11	18	12317	3.6	444	1957 1958 1959	4 9 5	13093 11950 11100	3.5 3.7 3.5	456 438 395	4 7 5	13318 11859 12672	443 445	4 7 4	12416 12459 12887	469 461 466
1006864	1	2	16765	3.8	636	1958 1959	1	15820 17710	3.9 3.7	617 654	1 1	14850 14550	554 532	1 1	9875 14715	349 567
1007194	1	1	12850	3.9	503	1959	1	12850	3.9	503	1	12020	440	1	12491	467
1007680	46	56	12528	3.8	475	1957 1958 1959 1960	13 16 22 5	13878 11301 11984 11638	3.8 3.9 3.8 3.6	516 434 456 420	1 6 19 4	11800 12093 12436 12598	460 464 467 466	3 18 3	1 1950 12548 12815	450 465 473
1008622	8	13	11850	4.0	469	1956 1957 1958 1959	2 3 3 5	15085 12510 11490 10798	3.8 3.6 3.9 4.2	572 453 444 453	1 1 2 5	12760 12470 12050 11988	478 455 459 443	1 2 3	1 1489 1 1680 12542	452 432 477
1010692	25	50	11560	3.6	410	1951 1952	1 8	11830 10578	4.0 3.6	468 376						

NEM DEKZEA SAA

TABLE 15.--DAUGHTER-AVENAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREEC,

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DADGHTER AVERAGE BY STRE

SIRE'	DAUGHTERS	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-LAY RECURDS NO.		FAT	YEARLY HI RECORDS NO.		FAT
						1953 1954 1955 1956 1957 1958 1959		11601 11522 12103 12685 13345 14110 10190		409 401 445 450 486 487 382	}	13760 12070	642 402	1	11227 11739	456 465
1012593	12	14	11358	3.7	421	1958	3	10577	3.8	400	2	12755	472	2	13124	419
101016			11.110	2.0	6.3.1	1959	11	11553	3.7	429	11	11630	430	11	11881	447
1013415		1	15360	3.8	582	1959	1	15360	3.8	582	1	16760	638		111.07	
1013718		2	11045	3.7	374 408	1959	2	11045	3.7	374	1	9940	375	1	11423	424
1014925		1	12530	3.3	408	1959	1	12530	3.3	408	2	11190	395 388	2	12034	4/4
1010723		1	10900	3.2	345	1956	1	10900	3.2	345		10010	300	•	11423	4. 4
1016950		20	13951	3.7	514	1953 1954 1955 1956 1957 1958 1959	2 1 3 3 5 2	13525 13220 15280 15203 15250 13390 10280	3.0 3.7 3.5 3.5 3.4 3.8 3.8	476 493 542 537 509 509 384	2	13590 14050	519 576	2	11963 14094	477
						1960	1	12970	3.7	485	i	13160	484	i	12797	567 465
1017797	50	72	12704	3.7	468	1956 1957 1958 1959 1960	3 8 17 36 8	12197 14066 12668 12250 12179	3.7 3.8 3.7 3.6 3.6	450 537 468 439 460	1 11 32 8	15660 13235 12752 13295	584 479 469 503	1 10 28 8	13429 12006 12326 12733	510 437 454 478
1020277	, i4	6	13216	5.7	488	1957 1958 1959 1960	2 2 1 1	12100 13875 11950 14140	3.8 3.5 3.6 4.0	453 475 430 559	1 1 1	7810 9650 14680	303 382 5 2 9	1	10061 10410 13996	385 407 511
10204/3	i i	1	16960	4.0	675	1959	1	16960	4.0	6/5	1	16150	654	1	16786	671
1022601	1	1	13710	3.7	508	1959	1	13710	3.7	508	1	15110	563	1	12938	479
1023004	1	1	12170	3.4	411	1959	1	12170	3.4	411	1	13270	495	1	13331	494
1024453	3	4	12290	3.6	444	1959 1960	3 1	12510 10120	3.6 3.6	451 365	3 1	11523 11460	421 416	3 1	12956 9941	452 360
1024853	3 26	33	13536	3.6	489	1958 1959 1960	2 21 10	13065 13070 13859	3.6 3.6	466 470 503	2 2 1 9	13385 12649 12534	505 487 492	2 21 7	11385 12602 12425	435 491 477
1024878	3 20	50	13047	3.7	483	1953 1954 1955 1956 1957 1958 1959	2 9 14 7 8 7 3	13415 12822 14415 10953 14289 13063 13540	4.3 3.0 3.7 3.8 3.7 3.8 3.9	573 463 537 421 525 492 517	1 4 2 3 3 3	12560 13733 12220 13063 12953 15623	438 548 465 501 466 511	2 2 3 3 3	10311 12770 12760 12575 12808	373 476 479 479
1024860) 10	28	10478	3.7	388	1951 1952 1953 1954 1955 1956 1957	1	10910	3.8 3.9 3.6 3.7 3.6 3.6 3.6 3.5	385	1	9940	366	1		350
100, 700			11:5:0			1960	1	13330	3.9	514	1	9110	337	1	9396	347
1025792		10	14560	3.5	511 497	1958 1956	1	14560	3.9	эН э10	1	11600	525	1	11042	411
						1959 1960	6	12730 13330	3.9 4.0	4 7 5 536	6	13572 14400	521 559	6 2	12670 12775	487 504
1028123	5 6	7	12176	3.8	466	1956 1958 1959	1 2 4	12490 12790 12563	3.7 3.8	528 4 71 480	2 4	11790 12750	465 4 71	2	10388 13374	379 512
1029933	3 24	80	12045	3.6	435	1952 1953 1954 1955 1956 1957 1958 1959	6 15 17 12 10 10 8 2	11492 10819 12751 13106 12516 12757 11825 13600	3.6 3.7 3.7 3.7 3.7 3.6 3.6	413 398 469 489 465 453 428 441	1 2 2 1 2 2 4 2	13150 11560 12650 12960 13495 12825 12255 12040	521 446 482 502 509 472 450 449	2 3 3 4 2	13010 12946 11907 11704 11751	491 493 455 427 438
1030404	4 2	2	10380	3.7	381	1958 1960	1	8960 11800	3.8 3.0	337 424	1	11440	419	1	11238	417
1030634	4 34	75	12060	3.8	456	1952 1953 1954	5) 4	13616 12509 12537	3.8 3.7 3.1							

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BRANCH FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	8A 718	RE		К	ECORO AVI	ERAGE 8	BY SIR	L BY	FKL SHLNING	YLAK				
SIRE NO.	OAUGHTERS NO.	KECOROS NO.		TEST PCT.		FRESH YEAR	KECOROS NO.		TEST PCT.		305-DAY (RECORUS NÚ.		FAT	YLARLY HE RECORDS NO.		EAT
						1955 1956 1957 1958 1959 1960	(TEIN 13785 13794 13550 12665 11041 15680	3.8 3.9 3.9	519 521 520 497 414 613	14	12690 13417 13040 11794 12120	1170 547 514 429 461	3 1 6 13	12764 12219 12197 12009 11510	464 504 456 437 428
1030635	s 89	142	11596	3.7	42.5	1951 1952 1954 1955 1956 1957 1958 1959	1.7	4190 8930 13532 11738 11712 11749 11513 12423 10233	4.0 3.0 3.5 3.5 3.6 3.7 3.7 3.7	167 319 468 411 427 427 425 458 364	 	11380 11574 12769	399 421 433 466 448	1 6 10 19 7	12154 11610 11427 13034 11889	453 437 427 477 477
1032617	2	2	14745	3.4	499	1957 1959	1	14400 15090	3.4 3.4	490 507	1	12070	438	1	12993	444
1033112	! 1	2	11685	3.5	412	1956 1957	1	10736 12640	3.5 3.5	379 445						
1033908	6	9	12505	3.7	461	1959 1960	6 3	12780 10667	3.7 3.6	468 381		12353 12250		5	11951	4414
1034471	61	107	11417	3.7	427	1952 1953 1954 1955 1956 1957 1958 1959 1960		12115 12416 10762 11104 11127 11660 12638 11033 12255	3.8 3.8 3.8 3.7 3.7 3.7 3.6 3.5	457 477 416 425 404 434 477 399 424	 	14940	517 546 452 417 454	1	11968 12099 12326 11653 12360	
1034472	1	2	11915	4.2	495	1958 1959	1	11110 12720		462 528	1	14210 14560	603 584	1	14235	544
1037451	81	149	11212	3.7	413	1952 1953 1954 1955 1956 1957 1958 1959 1960	35 26 24	14200 10978 9940 11223 10935 10657 11370 11895 13046	3.5	454 374 349 417 404 386 423 444 474	1 1 2 4 5 3 13 22 8	13a40 14150 16130 13640 13622 14013 13117 12271 12878	515 498 567 515 506 499 477 451 486	3 4 12	11761 14617 12704 12337 12120 12658	
1038489	2	2	14075	3.8	533	1958 1959	1	15580 12570	3.9 3.6	o13 453	1	13120 15510	481 555	1	13538 15925	518 584
1038494	1	1	12910	3.5	448	1958	1	12910	3.5	448						
1038627	2	2	14345	3.4	484	1959	2	14345	3.4	484	2	13225	477	2	13555	481
1039565	, 4	10	14901	5.7	545	1955 1956 1957 1958 1960	2	15137 15290 12790 13727 16100	3.5	531 525 447 532 622	1 1 1 2 1	15600 12980 14920 15025 13550	595 527 536 563 562	2 1 1 2	11860 12611 13919 14383	430 463 510 53
1041009	73	92	13462	3.6	478	1957 1958 1959 1960	49	12821 13939 13439 13014		452 493 479 464	1 10 46 10	15600 12161 12612 12588	597 453 467 464	3 9 41 14	11612 12167 12525 11804	446 464
1041559) 1	1	17460	3.9	688	1959	1	17460	3.9	880	1	13870	500	1	13309	491
1048678	3 94	172	12018	3.8	451	1953 1954 1955 1956 1957 1958 1959 1960	12 23 19 25 36	11723 11879 12172 12590 12013 11844 12178 11733	3.9 3.7 3.9 3.7 3.7 3.7	466 452 485 440 439 454	2 3 17 38	12670 14575 12597 12422 12566 12908	533 486 448 465	2 2 11 38	11282 11200 9870 10977 12694 11655	447 377 375 473
1049547	1	1	14010	3.5	493	1959	1	14010	3.5	493	1	15/40	589			
1054406	18	21	12924	3.7	478	1955 1957 1958 1959 1960	3	12970 12647 11230 14460 10820	3.6 3.8 3.7	460 435		11935 12855 12690	485	3 10 1	12470 13369 12666	50.1
1055483	5 8	12	12400	3.9	488	1956 1957 1958 1959 1960	1 3 2	11390 10260 12697 10585 13278	4.3 3.8 4.0	440 441 484 412 534	2	11685 12685 1202 7	442	2 2 4	11527 12830 12592	479
1056882	2 74	100	12486	3.7	465	1954	1	19340	3.€	731						

New JERSEY /9

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREEL, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY STRE

SIKE NO.	DAUGHTERS Nu.	RECUKOS Nú.		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.	FAT L8.	305-DAY (MILK		YEARLY HE RICORUS NO.		FAT
						1955 1956 1957 1958 1959 1960	HOLS 1 6 15 24 42 11		3.7 3.6 3.7 3.7 3.7 3.9	773 448 457 456 469 481	6 10 40 11	12765 13362 12709 13005	481 485 471 466	6 15 39 8	12840 12593 12309 12671	476 467 450 466
1057739) I	1	11450	3.7	421	1959	1	11450	3.7	421	1	9860	372	1	11423	4_4
1060223	3 1	1	11470	3.7	426	1958	1	11470	3.7	426						
1061894	+ 1	1	11780	7 . ک	440	1958	1	11780	3.7	440						
106171	1 7	12	13166	3.5	452	1955 1956 1957 1958 1959	2 1 3 3 3	11710 13320 11567 14293 11717	3.4 3.5 3.5 3.3 3.6	397 466 406 470 413	1 2	11930 12870	445 467	2	11930	430
106276	3 1	2	13215	4.1	541	1956 1958	1	12730 13700	4.0 4.2	500 574						
1062853	3 2	5	10114	3.6	361	1953 1954 1955 1957 1958	1 1 1 1	12450 8930 11870 10820 9210	3.5 3.3 3.4 4.4 3.5	441 296 401 475 319						
1064990	0 1	1	13390	3.9	510	1958	1	13390	3.9	516	1	12350	492	1	13069	506
106977(0 7	14	12849	3.6	458	1953 1954 1955 1956 1957 1958 1959 1960	1 2 2 2 2 2 1 3	14980 13245 8590 13005 12600 14880 13183 13020	3.3 3.4 3.5 3.9 3.9 3.9 3.1	489 450 303 497 489 520 450 521	1 3 1	13770 12660 12200	490 452 437	1 2 1	12524 11843 12382	463 432 456
1070036	6 ì	4	11758	4.1	471	1955 1956 1957 1958	1 1 1 1	14270 8126 12610 12030	4.0 3.9 4.4 3.9	568 316 552 470						
1070850	0 I	1	11240	3.4	384	1959	1	11240	3.4	384	ì	11860	433	1	11085	445
1070978	6 8	146	11972	3.7	443	1953 1954 1955 1956 1957 1958 1959 1960	3 20 28 31 28 16 17 3	14267 12145 12207 11698 12400 11862 12982 15037	3.6 3.7 3.7 3.7 3.7 3.6 3.9 3.6	522 448 456 434 458 447 505 539	2 1 4 5 12	11620 14530 12205 12002 11727 17420	478 547 489 481 459 638	1 3 4 11	12851 12917 11761 11570 11696	482 493 452 431 436
1073818	8 2	3	10130	3.9	388	1956 1957	2	10215 11140	3.9 3.7	38 7 414						
107436	4 6	6	13798	4.0	5 3 ช	1959 1960	5 1	13894 13320	4.0 3.7	546 499	5 1	12550 13780	470 517	5 1	12505 13832	468 511
1075616	0 1	1	8650	4.4	383	1959	1	8650	4.4	303	1	9250	365	1	10856	428
108077	7 2	3	14665	3.1	453	1956 1958 1959	1 1 1	16590 11430 14050	3.0 3.3 3.1	500 3 / 4 435	1	12390 12410	460 478	1	12666 12753	475 474
108127	0 11	15	11325	3.9	446	1956 1957 1958 1959 1960	1 1 2 9 2	11960 12720 12010 11268 10285	4.4 4.0 3.9 4.1	521 561 480 436 422	i 8 2	11720 12364 12415	396 462 471	8 2	12218 11745	452 446
108168	4 9	17	11079	4.0	439	1955 1956 1957 1958 1959 1960	3 4 5 2 2 1	10950 11210 11676 13340 10325 9800	3.7 3.9 4.0 3.9 4.1 3.9	404 437 469 512 430 386	1 2 2 2 2 2	14900 13200 12745 13870 12545 11540	525 502 498 514 491 421	1 2 2 2 2 2	13026 12928 13255 14290 12677 11303	468 436 502 544 487 423
108197	1 36	59	12384	3.7	465	1954 1955 1956 1957 1958 1959	5 11 11 12 9 9	8874 13311 13348 13248 13348 12620 12120	3.6 3.6 4.0 4.0 3.7 3.7	318 486 526 519 495 467 429	1 1 5 8 2	12930 11980 11634 11939 9935	500 447 419 455 409	1 3 8 2	10911 10809 11393 9413	424 391 437 388
108289	1 3	5	12992	4.1	522	1955	1	13560	3.6	485	1	12350	428			

1111076

11

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DAILY

	DAUGHTER	AVERAGE	BY SI	Rē		F	ECORD AV	LRAGE	BY SIR	E BY I	FRESHENING	YLAK				
SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.		FRESH YEAR	KECORDS NO.		TEST PCI.		RECORDS		FAT	YEARLY HE RECURDS NO.		FAT
						1957	HOLST	TEIN 10330	4.3	441		13620	501	1	13309	5.50
						1958 1959	1	13430 14700	3.9 4.1	522 602	1	14210 12580	518 478	1	12459	467
108403	2	3	10965	4.0	434	1960 1958	1	15600		640		11900	450		12263	457
100403		,	10703	4.0	434	1959	2	11890 10935		455 441	1 2	10650 10450	399 388	1	9418 11630	393 449
108597	3 1	4	14538	3.6	522	1955 1956 1957 1958	 	14030 15940 14180 14000	3.7	492 592 509 493						
1086776	5 I	14	10850	3.5	375	1955 1956 1957 1958	1 1 1	10910 11460 11610 9420	3.4 3.7	369 386 425 321						
108797	+ 10	12	13881	3.7	514	1958 1959 1960	2 9 1	15270 14081 9810	3.7	548 522 362	2 9 1	12395 12029 8780	451 467 327	2 9 1	13293 12537 11336	461 465 445
108015	3	3	11830	3.8	444	1959 1960	1 2	14410 10540		549 392	1 2	12570 12135	459 468	1 2	12895 11718	
108870	7 3	5	11948	3.5	424	1955 1956 1957	3 1 1	11893 13590 12900	3.5	410 479 454						
108870) I	2	13785	4.0	550	1957 1958	1	14640 12930		598 501						
108942	3 1	i	11870	3.7	442	1959		11870		442	1	10650	382		12034	435
1091298	3 14	446	13385	3.7	490	1955	ĮΫ	13105		467	٥	14930	580	.1	12742	504
						1956 1957 1958 1959 1960	58 61 103 170 35	13450 13486 13532 13348 13396	3.6 3.7 3.7	485 487 495 492 494	12 17 51 158 32	12515 12835 12752 12469 12572	478 502 477 466 478	10 16 47 139 28	12173 12735 12627 12314 12585	459 479 479 459 469
109277.	3 5	9	13735	3.6	490	1955 1956 1958 1959 1960	3 3 1 1	12703 13593 13150 17260 15680	3.6 3.6 3.9	447 465 467 673 587		11130 15430 13980	396 566 505	1 1 1	1407 <i>2</i> 14432 13996 14181	496 516 512 526
1094519	5 27	43	10799	3.8	409	1955 1956 1957 1958 1959 1960	2 4 9 12 14 2	7335 11560 11244 10427 10841 11210	3.9 3.9 3.9 3.0	346 439 429 402 412 401	8 13 2	11129 10565 10945	399 390 400	8 4 2	11366 10866 1ú889	415 404 402
109492	1 4	6	12603	3.8	474	1958 1959	2	13260 11913		493 448	2	13610 12423	499 458	2 4	12028 12026	447 445
109947	3	4	10260	4.3	440	1958 1959 1960	1 2 1	8380 10870 9700	4.7	392 453 436	1 2	101a0 11370 9a20	420 427 395	1 1 1	10617 13930 10856	435 5∠1 428
110019	3 6	7	11362	3.9	445	1959 1960	4 3	11180 12587		416 509	ц З	12235 12237	480 488	4	12611	5 97
110156	5 1	1	12100	3.4	413	1959	1	12100		413	1	12110	439			
110465	7 1	1	9760	3.7	357	1957	1	9760	3.7	357						
110479	7 1	1	9040	3.4	30 b	1959	1	9090	3.4	306				1	8785	3016
110531	3 20	23	12705	4.0	504	1958 1959 1960	3 13 2	11815 13004 12135		449 531 470		12594 12795 11655	488 487 465		12504 12862 12775	469
110635	+ 1	1	10580	3.4	363	1959	1	10580	3.4	363	1	9920	376	1	11423	424
110677	5 4	6	12710	3.4	437	1956 1957 1959	1 2 2	11695 14285	3.6 3.4 3.5 3.2	438 403 497 449	2	11570 13190	425 494	2	10933 12666	
110986	4 5	6	11214	3.8	42 ⁸	1960	4	12610	5.1	476	4	13795	519	4	14254	545
111107	5 7	9	13145	3.5	459	1960 1956	2		3.7	245	1	9850	3 7 8	2	11238	429
	,	7	15143	3.3	437	1957 1958 1959 1960	1 2 3 1	11660 11330 12950	3.9 3.8 3.4 3.0	458 423 438	3 I	13147 11350		3	11903	439

1957 1958 1959

13 13434 3.7 491

3 13533 3.6 494 2 13820 3.9 526 7 13329 3.7 492 1 15410 551 1 15610 557 6 12320 446 1 14505 510 1 15064 549 6 12368 450

TABLE 15.--GAUGHTER-AVERAGE OF SIRES IN SCRVICE IN ARTIFICIAL BRECGING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

298

DAUGHTER AVERAGE BY SIRE

SIRL NO.	DAUGHTERS NO.	RECURDS NO.		TeST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT Lo.		CONTEMP MILK Lb.		YEARLY HE RECOROS NO.		FAT
						1960	HOLS	TLIN 12280	3.7	450	1	15660	572	1	13080	488
111249	8 13	15	11102	3.8	424	1959 1960	13 2	11128 10215	3.8 3.6	425 370	12	11843 12890	430 480	12 2	11638 12454	425 455
1113270	8 18	21	12071	3.8	454	1955 1956 1958 1959 1960	1 4 3 9 4	12190 12308 12797 12828 10880	3.6 3.7 3.8 3.8 4.0	442 452 489 482 436	3 9 4	120 17 12762 9230	453 473 361	2 8 3	12268 12738 12517	452 472 461
111501	4)	1	10330	3.9	399	1959	1	10330	3.9	399	1	12980	479	1	12175	457
111951	4 18	21	14041	3.6	499	1956 1957 1959 1960	1 1 16 3	13940 9550 14203 14517	4.1 3.3 3.6 3.5	566 318 505 502	16	13984 13845	520 495	15 1	13130 12666	488 459
112481	1	1	14540	3.7	538	1959	1	14540	3.7	538						
112472	0 6	9	12220	3.7	448	1956 1957 1958 1959	2 2 3 2	11635 14645 13193 11300	3.9 3.8 3.6 3.4	447 553 482 385	1 2	11460 14895	39B 545	1 2	10529 14034	372 519
39د112ع	5 . 9	12	11549	3.6	4 4	1958 1959 1960	3 6 1	11593 11633 12060	3.6 3.7	436 418 445	2 8 1	13500 12920 11800	484 468 418	3 7	11034 12115	404 446
112831	4 1	1	11130	3.4	374	1959	1	11130	3.4	374	1	10210	377	1	12034	435
112930	ò 11 th	81	11651	3.7	430	1954 1955 1956 1957 1958 1959 1960	3 14 20 18 11 13	11087 11539 12243 10932 11275 12174 13620	3.6 3.7 3.0 3.7 3.6 3.7 4.1	399 423 437 400 400 456 558	1 3 3 3 11	10390 12303 13403 12107 12375 12320	409 472 502 468 460 493	1 2 2 3 10 1	11194 13418 13669 11801 11934 13026	426 513 514 439 442 502
113299	3 22	29	13502	3.7	496	1956 1957 1958 1959 1960	3 3 5 16 2	13693 15663 15090 12884 16010	3.7 3.7 3.7	501 583 553 473 507	1 3 16 2	18150 13443 12953 13235	681 513 471 476	1 3 16 2	15598 13978 12592 14203	605 519 459 512
11.346∠	7 77	143	11133	3.6	403	1954 1955 1956 1957 1958 1959 1960	3 38 40 26 17 18	11033 10589 10747 12324 11835 11597 2260	3.7	393 386 392 439 434 417	4 6 5 7 15	13548 12455 12616 11677 12199 5710	506 459 478 442 451 212	2 6 6 6 13	12661 12361 12944 11792 12044 9505	461 454 493 439 444 338
114153	0 7	9	10018	3.6	362	1956 1957 1958 1959	1 4 2 2	12570 11513 7975 9545		428 424 290 334	1 2	10190 9380	373 339	1 2	9341 9538	
114820	7 26	35	11044	3.8	414	1954 1955 1956 1957 1958 1959	1 5 9 8 6 5	11620 11722 10380 11593 9768 11476 12120	3.6 4.0 3.8 3.7 3.7	403 423 409 443 361 421 484	3 5 1	11707 10846 13720	429 410 507	2 5	10529 10401	372 398
114899	4 8	9	11333	3.7	412	1959 1960	6	11178 10970		428 385	5	12408 10263	478 361	5 3	11848 10188	466 368
114946	0 1	1	13060	4.1	536	1960	1	13060	4.1	536	1	12200	437	1	12382	456
114983	3 4	7	13068	3.7	482	1956 1957 1958 1959	1 1 2 3	12440 13140 11760 13700	3.4 3.7	430 450 422 513	1 2 3	13120 12475 13260	462 469 510	1 1 2 3	12513 13309 13244 13483	460 530 484 508
115131	1 4	4	13243	4.0	536	1958 1959] 3	17790 11793		774 457	1 3	16730 12447	671 475	1 3	16034 13222	627 503
115186	3 7	7	11376	3.9	443	1959	7	11376	3.9	443	7	12324	462	7	12222	459
115374	0 2	3	1498B	3.7	561	1958 1959 1960	1 1	15910 17430 10700	3.3	653 582 356	1 1 1	16750 15880 14520	635 562 530	1 1 1	16034 14530 15522	622 535 567
115427	1 1	2	14695	3.4	497	1950 1959	1 1	15260 14130		491 503	1	15100 9930	539 355	1	13331	481
115481	7 91	149	12754	3.8	477	1954 1955 1956 1957 1958 1959	4 16 17 19 39 45	12688 11984 12965 12154 12962 12841 13698	3.8 3.8 3.7	472 458 474 464 487 475 522	2 4 0 27 40 5	13235 14105 14097 12423 12652 12504	474 528 547 456 474 486	3 4 4 23 41 7	11496 12661 12881 11877 12545 11917	425 481 479 439 470 453

DAUGHTER AVERAGE BY SIRE

TABLE 15.--CAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED. By year of fresheming--records from this state only

TABLE 15.--OAUGHTER-AVENAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YLAR	RECORDS NO.	MILK LB.	TEST PCI.	FAT Lu.	RECORDS	CONTEMP MILK Lb.	FAI LB.	YEARLY HI KECUKDS	MILK LB.	RAGE FAI Lo.
						1959 1960	HULS1 31 3	TEIN 12001 13473	3.0 3.4	438 459	30 3	12161 13173	449 502	29 3	11976 12655	435
1206617	7 52	60	12957	3.9	510	1958 1959 1960	1 5 i 8	12260 13099 13541	3.6 3.9 3.9	447 511 525	1 45 8	12300 12294 13196	439 469 486	1 34 6	12088 11821 12948	446 444 471
1206797	7 57	19	13336	3.8	500	1956 1957 1958 1959 1960	1 8 21 37 12	10740 13163 14079 12448 15033	3.5 3.7 3.8 3.8 3.7	373 489 527 470 558	2 15 35 12	12630 12637 12292 13459	452 478 457 492	2 11 35 10	11522 11975 12009 13620	437 452 448 503
1211329	5 27	31	13523	3.6	488	1957 1958 1959 1960	1 6 20 4	13090 14518 13325 14020	3.7 3.8 3.6 3.6	480 547 472 518	5 20 4	12264 12430 12348	482 465 4 7 3	5 19 3	12127 12470 14286	454 464 491
1212623	3 184	252	12355	3.7	460	1956 1957 1958 1959 1960	9 41 60 112 24	11480 12539 12504 12390 11539	3.8 3.7 3.7 3.8 3.8	437 458 463 464 432	4 12 40 101 23	13798 13088 12510 12253 11803	492 492 465 458 436	4 10 37 92 22	12176 12237 12438 12222 11696	459 463 463 458 459
1213933	3 92	119	11632	3.6	417	1957 1958 1959 1960	2 18 87 12	13445 11624 11847 11336	3.6 3.6 3.0 3.3	471 413 423 395	13 79 10	12252 12037 10801	432 444 411	12 76 11	11548 12055 11546	408 442 478
1216123	3 1	1	12900	4.0	514	1959	1	12900	4.0	514	1	12370	467	1	12917	487
1216909	9 1	1	9060	4.3	387	1959	1	9060	4.5	387	1	11870	423	1	11805	433
121695	7	8	13381	3.8	500	1959 1960	žą žą	13113 13483	3.9 3.8	499 511	14 14	13103 12850	479 474	іц 14	12462 12770	448 466
1222748	3 9	13	11364	4.1	462	1957 1958 1959 1960	1 3 7 2	12380 11560 11974 10940	3.8 4.0 4.1	475 458 485 446	1 7 2	11460 12343 11165	398 453 429	1 7 2	10529 11503 11500	372 426 429
1224123	3 1	1	11200	i4 . i4	489	1959	1	11200	4.4	489	1	11720	431	1	12655	467
122431	3	3	9353	3.8	356	1959	3	9353	3.8	356	ک	10723	410	3	11398	424
1224521	3	3	12090	3.5	422	1959	3	12090	3.5	422	3	12813	468	3	12510	457
1224837	7 2	2	12665	3.6	450	1959 1960	1	14310 11020	3.2 4.0	458 442	1	11980 11360	463 414	1	13407 12481	492 467
1230109	9 1	1	10030	3.2	318	1959	1	10030	3.2	318	i	12760	469	1	12895	467
1230734	4 I	2	16 160	3.8	607	1959	2	16160	3.8	607	1	14210	527	1	13113	480
1230960	0 54	70	11209	3.9	434	1958 1959 1960	19 34 17	10863 11864 10522	3.9 3.8 4.0	417 447 422	13 32 16	12356 12433 11846	452 458 436	11 27 12	11871 11930 11948	439 439 448
1233752	2 84	99	12219	3.7	454	1957 1958 1959 1960	6 23 58 12	12680 12705 12203 12619	3.9 3.7 3.7 3.7	409 408 455 466	2 9 55 11	15125 13488 12524 11697	579 482 457 442	2 9 55 10	14765 13243 12394 12251	543 487 452 450
1239885	5 1	2	13660	3.6	499	1958 1959	1	12670 14650	3.6 3.6	462 535	1	12790 13970	476 529	1	13156 13560	507 513
1241982	2 1	2	13105	3.8	491	1958 1959	1	14230 11980	3.7 3.6	527 455	1	14910 14910	558 544	1	9875 14715	349 567
125236	7 3	4	11127	4.0	440	1959	4	11746	3.9	451	ځ	13430	511	3	13687	512
1260630	0 2	2	14310	4.0	560	1959	2	14310	4.0	560	2	14040	537	2	14039	531
126444	7 2	2	11905	3.6	430	1959	2	11905	3.6	430	2	12770	473	2	13952	497
1272569	9 3	3	12277	3.4	421	1960	٤	12277	3.4	421	ځ	9843	361	3	11470	419
127343	4 2	2	13190	4.0	510	1960	2	13190	4.0	0 l c	2	12740	479	1	11510	428
1276891	4 1	1	13210	3.7	482	1959	1	13210	3.7	482	1	12900	476	1	1237?	463

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

UAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECURDS NO.		TEST PCT.		305-DAY CONTEMP. AV. YLARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAF NO. LB. LB. NO. LB. LB.
							JEK	SEY			
35563	7 6	13	7546	5.3	403	1947 1948 1949 1950 1951	3 2 3 4 1	7753 9295 7477 6663 4760	5.0 5.7 5.2 5.4 4.4	391 525 386 356 211	
36257	9 3	14	7407	5.6	414	1947 1948 1949 1950 1951 1952 1953	3 2 2 2 2 2	8637 5995 6590 6420 6785 7000 6180	5.6 5.7 5.9 5.6 5.3 5.6 5.6	482 345 388 358 357 392 344	
38344	2 1	2	8710	5.4	469	1947 1948	1	8150 9270	5.5	446 491	
38393	2 16	58	7424	5.0	369	1947 1948 1949 1950 1951 1952 1953 1954	7 6 11 9 8 7 4 4 2	6897 7973 7962 7579 6248 6894 7003 10030 10200	5.0 5.2 4.8 5.2 4.9 5.1 4.7 4.8 4.6	342 412 354 592 304 346 327 469 471	
39∠86	9 1	1	5870	5.5	321	1949	1	5870	5.5	321	
40492	1 1	2	4990	5.5	271	1952 1953	1	5750 4230		338 215	
41043	7 (31	8166	5-4	439	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	4 3 2 2 5 3 4 3 2 2 1	8483 7997 9520 7565 7994 7597 7703 7787 6090 7280 5700		492 396 472 445 431 404 396 421 319 447 335	
41148	3 10	17	6334	5.3	33∠	1951 1952 1953 1954 1955 1956	2 5 1 1 2	5070 6640 6892 5970 5120 6395 6500	5.9 5.1 5.3 4.9 5.5 5.7	294 335 358 295 283 358 354	
41515	9 7	19	7179	5.4	398	1949 1950 1951 1952 1953 1954 1955	2 3 5 3 2 1 2	6810 6590 7484 1763 6525 8920 8280 6060	6.0 5.6 5.6 6.0 5.2 5.3	379 388 412 431 391 467 434 337	
41954	8 1	2	7870	5.1	399	1956 1957	1	7830 7910		391 407	
42562	2 1	2	8625	5.1	434	1949 1950	1	9920 7330		495 374	
42754	4 1	1	6720	5.0	338	1949	1	6720	5.0	338	
42873	4 2	3	8115	5-4	437	1952 1954 1955) 1 1	7470 8556 8970	5.7	383 489 492	
43213	8 15	t† f†	8478	5.1	421	1947 1948 1949 1950 1951 1952 1953 1954 1955	3 3 7 9 7 6 5 2	7410 6653 8267 7736 9141 9418 8960 10605 6580 7120	5.3 4.9 5.2 5.0 5.0 4.8 4.5 4.8	384 357 405 400 450 450 411 458 317 359	
43262	9 10	14	6608	4.8	315	1953 1954 1955 1956 1957	5 4 2 1 2	6820 6978 5200 8790 3920	4.7 5.7 4.3	343 325 283 382 163	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

302

DAUGHTER AVERAGE BY SIRL

SIKE NO.	UAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-LAY (RECURDS NO.	CONTEMP MILK Lb.	FAT	YEAKLY HI RECORUS NO.	MILK LB.	FAI
							JERS									
434878	3 22	67	7828	5.1	394	1948 1949 1950 1951 1952 1953 1954 1955	1 6 14 10 12 9 6 2	4980 7182 7609 7228 8501 7712 8348 8715 9720		277 351 383 370 450 398 422 456 427						
438172	. 2	6	8427	5.8	492	1947 1948 1949 1950 1953	1 1 2 1 1	9790 8640 7925 8330 7950	5.7 6.0 6.0 5.8 5.5	550 520 477 480 439						
448737	2	ų	6937	4.B	332	1951 1952 1953 1955	1 1 1	5350 6490 6050 7910	4.8 4.7 4.8 4.8	259 307 293 378						
454147	8	20	9543	5.6	536	1953 1954 1955 1956 1957 1958	5 3 5 3 2 2	10640 11497 8982 8353 9840 9850	5.8 5.8 5.6 5.3 5.5	616 612 516 479 516 541	1 1 1	12080 12190 6100 9330	615 460	2 2 1	10083 9690 9886 8949	561 538 543 500
460440	10	34	8218	5.1	412	1951 1952 1953 1954 1955 1956 1957	1 7 6 7 5 5 2	8550 827 7937 7846 6694 6468 7250 7640	4.7 5.2 5.5 5.0 5.2 5.1 5.2 5.7	403 425 428 394 341 325 370 435						
462273	3 21	55	8132	5.1	41ú	1951 1952 1953 1954 1955 1956 1957	4 15 11 12 9 2 1	10095 7117 7971 8913 8793 10875 8460 12550		491 361 385 441 431 497 402 735	ı	10010	546			
467830) 1	ı	9410	5.4	513	1952	1	9410	5.4	513						
4719ə1	1 3	6	9878	5.1	502	1952 1953 1954 1955	1 1 2 2	8540 12650 9100 9940	5.7 4.7 5.2 5.0	490 592 475 490						
477748	3 I	2	7 020	4.9	347	1951 1952	1	5530 8510	4.E 5.0	265 428						
47922	1 1	1	6100	5.3	322	1956	1	6100	5.3	322						
481679	9 14	37	7281	5.5	401	1951 1952 1953 1954 1955 1957	1 10 11 6 5 3	6030 8251 5996 8437 6952 8737		367 445 335 479 368 447 568	2 1	9015 9600	448 462	2	5697 9003	
482505	b I	2	8310	4.9	401	1956 195 <i>1</i>	l I	9430 7190	4.8							
482805	5 1	1	6830	5.5	378	1958	ı	6890	5.5	378						
¥8∠8 <i>0</i> 1	7 53	112	9259	5 · 1	470	1951 1952 1953 1954 1955 1956 1957 1958 1959	7 10 20 20 14 2 3 17 17	9437 8412 9037 9519 8202 6920 8933 9810 9991	5-2 5-4 5-1 4-9 5-1 4-7 4-9 5-4 5-2	489 450 457 465 422 354 423 409 531 498	1 6 10 2	9330 9392 960 7 9460	485 455 490 500	1 6 10 1	55,97 7732 10072 3622	306 343 518 438
48875	4 2	5	7503	5.5	405	1954 1955 1956 1957 1959	1 1 1 1	7640 7660 6350 6650 7930	6.7 6.1 6.3 4.4	515 511 367 421 351				1	11592	443
49125	5 5	11	8867	4.7	404	1954 1955 1956 1957 1958	2 3 1 3	8630 9500 12680 8510 5915	4.5 4.7 4.2 4.0 4.9	367 438 335 403 277						
49461	0 1	3	8017	5.1	408	1954 1955	1	7710 8370	4.9 5.∠	378 438						

57 19 11

7250 5.6 408

2090 5.9 123

FABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHLNING YEAR 305-0AY CONTLMP. AV. YLARLY HERO AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LB. LB. NO. LB. LC. SIRE DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. L8. PCT. LB. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. JERSEY 7970 5.1 8640 4.6 4.6 4.6 5.0 5.0 9666 470 6.0 8390 432 9003 452 7B20 6.0 50 19 02 1.1 10078 4.9 9B10 4.8 4.8 4 - 15 4.7 9980 532 9036 472 6430 6.2 398 6.2 9668 493 5.3 5.4 78د 4.6 5.8 5.0 4.7 5.4 5.4 8510 495 5.4 6.2 11423 924 4.5 L L 4.8 5.7 5.7 716 9910 5.8 6.1 271 8306 446 6.1 4.7 4.9 4.5 B949 4.7 4.5 32.8 4.3 ī 10500 5.3 10500 5.3 PAUR hus

7250 5.6 408

11848 458

5100 332

NEW JLKSEY 304

TABLE 15.---DAUGHTEK-AVERAGE OF LIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY URCED,
BY YEAR OF FRESHENING--KECOROS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE UA NU.	AUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YLAR	KECOKUS		TEST PCI.		305-DAY RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							BROWN	SWISS								
37398	Ŷ	29	10318	3.8	392	1947 1948 1949 1950 1951 1952 1953 1954 1956 1957	4 1 4 5 3 1 1	10 10 a 11435 9430 11860 10260 11278 9413 9773 10380 12940 11060	4.0 4.0 3.8 3.6	403 456 375 442 374 400 326 370 406 473 416						
38049	2	2	9680	4.2	390	1959	2	96B0	4.2	396	2	11570	499	2	11467	477
39593	1	2	12360	4.3	522	1952 1953	1	13120 11600	4.1 4.4	537 507						
458 <i>1</i> 8	26	96	10674	3.7	389	1947 1948 1949 1950 1951 1952 1953 1954 1956	1 2 3 15 14 17 15 14 9	9980 10845 11310 10590 11356 11324 10565 10730 10306 B122	4.0 3.9 3.7 3.6 3.5 3.4 3.8 4.1	363 435 450 410 418 402 367 362 388 327						
46379	1	3	9817	4.5	445	1959 1953 1954	1	12740 8600 9630	3.B	480 391 439	1	9960	424	'	10562	443
						1955	i	11220		506						
48671	В	30	11261	3.B	423	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	2 2 1 5 5 2 5 4 1 1		4.1 4.3 3.9 3.6 5.9 3.7 3.9 3.8 4.0 4.0	452 429 453 463 497 426						
486/2	3	4	14 185	4.7	669	1952 1953	1 3		4.9	428 716						
500 42	2	9	12581	3.9	486	1952 1953 1954 1955 1956 1957	2 2 1 1 1 1	12755 14365 11670 14420 10400 10690 12380	3.8 3.9 3.9 3.9 3.9	481 553 460 56B	1 1 1 1	8240 10510 10350 9920 9510	457 516 426	1 1 1	10987 10769 9897 10366	468
5 1890	3	4	7642	4.1	30ช	1953 1954 1956	1 1 2	B170 5940 7935		350 253 312						
52529	5	10	B169	4.0	330	1949 1950 1951 1952 1953 1954	1 2 2 2 2 1	7270 7280 7860	4.1 4.2	274 297 268 328 399 447						
54730	4	11	в077	4.2	338	1949 1950 1951 1952 1954	3 3 3 1 1	7617		329						
55258	1	1	9670	3.7	356	1955	1	9670	3.7	356						
57994	31	103	10197	4.2	420	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	1 7 15 13 20 16 10 9 7	11473 10158 10458 11202 10748 10828 10019	4.2 4.1 4.0 4.4	489 424 436 457						
59585	1	2	10330	4.5	469	1959	2	10330	4.5	469	1	11550	486	1	9756	427

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING GREATIZATIONS--GROUPED BY HREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

							CODO AN			C 64	Carl Elli	VC A .				
	OAUGHTER	AVERAGE	84 211	K E		R	ECORO AVI	ERAGE	BY SIR	E 8Y I	FRESHENING		. AV.	YLARLY HI	RO AVE	RAGE
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TLST PCT.		RLCORUS NO.	MILK L8.	FAI	RECOROS NO.	MILK LB.	FAI
							BROWN :	SWISS								
5969	9 3	4	8078	4.2	341	1956 1957 1958	1 1 2	9490 8460 7630		386 342 329						
6156	0 1	1	16530	3.9	642	1956	1	16530	3.9	642						
6222	8 1	1	4850	4.2	205	1955	1	4850	4.2	205						
6450	5 1	5	10910	4.3	472	1955 1956 1957 1958 1959	1 1 1 1	11420 11820 11870 9860 9580	4 - 4 4 - 1 4 - 6 4 - 4 4 - 1	506 486 542 430 394						
6477	3 5	7	10361	4.2	439	1955 1956 1958 1959	1 1 2 3	12050 7780 9065 10620	4.1 4.0 4.0 4.2	492 312 372 452		11720 12143	508 497	1 2	11085 12198	465 505
6483	7 3	5	8503	4.3	362	1957 1958 1959	1 1 3	7720 10580 8333	4.2 4.1 4.4	324 433 364	1 2	9950 10955	398 435	1 3	10431 11227	
6542	1 6	9	10032	4.1	411	1953 1954 1955 1956 1959	1 3 1 3	14080 10370 7780 9993 14780	4.5 4.1 4.0 4.0	605 426 309 398 620						
6835	4 1	1	15090	4.0	607	1959	1	15090		607	1	12160	503	1	12829	5/6
6904	8 21	64	10616	4.1	431	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 2 15 12 9 10 5 5 1	11810 9360 10585 10025 11813 10300 11068 11192 9396 10020 14080 8660	4.0 4.1 4.1 4.0 3.9 3.9 4.1 4.3	496 378 420 409 485 416 437 440 385 426 561 343	2 1 2 1 2 1	8995 16860 12460 10250 11380 12860 13340 10110	394 628 538 439 477 591 551	3 2 2 1 1	10369 11505 10933 9396 12590 12644	443 494 462 416 545
6965	3 1	1	7860	3.9	310	1958	1	7860		310	'	10110	429	'	12044	241
6997		3	11893		500	1956 1958	1	10020 13400	4.3 4.1	432 554						
7192	0 1	2	4700	4.4	205	1959 1955 1957	1	12260 5470 3930	4.0	514 221 188						
7239	4 2	2	9785	4.3	418	1959 1960	1	10130	4.1	419 417	1		446 450	1	9756 10540	427 455
7289	6 1	1	7 160	4.1	291	1955	1	/160	4 - 1	291						
7289	8 1	1	12240	4.3	523	1958	1	12240	4.3	523						
733 1	8 6	13	11512	4.5	514	1954 1955 1956 1957 1958 1959 1960	1 1 2 4 2 2	14580 14180 11660 11120 10525 8050 11580	4.5 4.6 4.5 4.6	485	1	10820 10660 10010		1	10137 10540 10431	4∠6
7406	2 1	1	7390	4.2	312	1959	1	7390	4.2	312	1	8910	373			
7620	2 2	2	9735	4.6	448	1956 1958	1	8040 11430		368 528						
7/77	5 3	4	10297	4.0	415	1958	4	10965		436	2	11280	412			
7787	0 10	38	11587	4.2	488	1951 1952 1953 1954 1955 1956 1957	2 3 7 6 4	12155 12390 11604 11551 11254 12525 11883 12880	4.1 4.3 4.3 4.1 4.1	537 516 498 497 481 512 489 549	1 2 2 2 1	13410 11430 9785 10765 7900 12680	531 495 474 468 321 523	2 2 1 1	10808 10453 10540 10366	440 426
7962	4 9.	18	11392	4.3	481	1952 1953 1954 1955 1956 1957	4, 3 1 6 2 1 1	10558 11180 13610 11395 11315 11320 12250	4.3 4.0 4.2 4.2 4.0	544 480 471						
8069	9 4	4	13965	4.0	563	1959	4	13965	4.0	563	4	11950	494	3	12325	507
8165	2 2	ų	88/3	14 . 14	380	1958 1959 1960	2 1 1		4.5 4.3 4.1		1 1	11610 12200	503 500	1	11085 12513	

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS		TLST PCT.	FAI L8.	FRESH YEAR	KECUROS NO.			FAT L8.	305-UAY (RLCGRUS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							BROWN								200	
8240	5 10	14	10717	14 + 14	467	1956 1958 1959 1960	2 1 9	10540 11360 10736 10075	4.5 4.4 4.4 4.1	469 475 471 409	5 1	11590 10190	49's 426	5	11602 12208	500 528
8246	2 3	3	13120	4.3	563	1959	2	14780	4.3	633	2	12165	499	2	12677	517
825 1	7 1	2	8855	4.3	379	1960 1956 1957	1	7780 9930	4.3	423 338 419	1	9930	391	1	12579	512
8∠58	5 50	97	9719	4.3	417	1952 1953 1954 1955 1956 1957 1958 1959	1 6 16 9 17 13 11 17 7	8730 9062 9447 9269 9299 9639 11099 11206 8847	4.5 4.5 4.1 4.3 4.5 4.5 4.1	373 398 395 384 403 400 501 495 367	1 1 1 3 2 10 6	8580 9120 9820 9537 11695 11121 8367	300 359 389 386 501 462 335	1 1 1 3 9 5	7979 3644 9450 10540 11667 9631	346 358 335 440 485 389
8562	5 2	2	11380	4.2	478	1959	2	11380	4.2	478	2	9240	377	2	9821	403
8411.	3 2	3	9400	4.4	411	1954 1958	1 2	7210 11590	4.4	317 504	1	10960	473	1	10366	449
8465	0 5	В	12398	4.3	520	1953 1954 1956	4 3 1	10785 13117 14800	4.0 3.6	464 527 534						
8613	7 1	2	12070	4.2	501	1959 1960	1	13530 10610	4.1	56 l 44 l	1	11390 9900	482 412	1	9756 10856	
8613	9 116	211	9444	4.3	399	1952 1953 1954 1955 1956 1957 1958 1959 1960	8 17 42 12 48 39 16 25	7818 8459 8890 10581 9464 9643 11164 10311	4.6 4.3 4.2 4.4 4.1 4.1 4.4 4.5 4.2	361 363 374 460 392 397 484 440 466	5 1 7 3 5 13	9014 10430 9589 9317 10692 10635 9075	35/ 442 390 373 449 439 367	1 2 3 14 3	8927 10236 10842 10876 9490	405 427 456 457 303
8625	9 1	1	8280	4.4	365	1954	1	8280	4.4	365						
8667	4 23	46	9226	4.3	398	1953 1954 1955 1956 1957 1958 1959	3 13 1 14 7 4 3	7267 8535 10530 9670 8203 13650 13607 12840	4.3	320 369 462 405 334 397 594 579	1 1 1	9570 11360 13660	381 472 570	1	11238	491
8/01	5 13	28	10875	4.0	435	1953 1954 1955 1956 1957 1958 1959	1 8 2 6 8 2	10500 11069 10355 10002 9805 13010 14290	3.8 4.0	442 428 416 381 395 517 621	2 1 2 1	11945 10640 10280 10240 9910	511 469 421 426 406	1 1 1	12241 11064 10431 10573	467
8713	8 24	53	10441	4.1	425	1953 1954 1955 1956 1957 1958 1959	1 7 11 14 8 7 5	8740 11971 10621 10370 12221 8984 9838	3.9		2	12210 10475 10667	413		7979 8644 9450 10464 10527	353 345 421
8763	0 2	2	12035	4.3	514	1956	2	12035	4.3	514						
8707	7 1	6	9850	4.3	421	1953 1954 1955 1956 1957 1958	1 1 1 1 1		4.5	471 363			•			
8768		3	12227	4.3	519	1959	3	12227	4.3	519	3	12183	500	3	12720	5∠0
8645	5 1	ц	12383	4.5	552	1952 1953 1954 1956	1 1 1 1	12430 12920 13690 10490	4.5 4.6 4.5	531 580 624 473						
8961	2 1	2	13485	4.2	560	1954 1959	1	12180 14790	4.3	523 596						
8961	4 2	2	13120	4.7	618	1956 1958	1	16080 10160	4.9	790 445						
9000	0 1	2	7890	4.0	319	1954 1956	1	9310 6470	4.5 3.4							

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	UAUGHTER	AVERAGE	BY \$1	RE		н	ECURU AV	CRAGE :	Y SIR	E BY	FRESHENING	YEAK				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS	MILK L8.	TEST PCT.	FAT LB.	SOS-DAY RECORUS NO.	MILK		YLARLY HE RECORUS NO.		FIT
							BRUWN	221W2								
9 12 3	6	9	11786	3.9	461	1956 1 9 58 1959 1960	1 1 6 1	9940 11010 12380 14720	3.9 3.8 3.9 3.8	387 417 489 557	4	11455 9320	469 380	3 1	11889 12328	479 500
9185	6 2	2	9545	4.5	432	1959	2	9545	4.5	432	1	11950	490	1	11085	405
9209	9 1	3	10473	3.6	373	1959 1960	2	11180 9060	3.5 3.7	393 334	1	10760 10330	419 416	1	10431	435
9439	2 1	2	5935	4.5	267	1956 1958	1	6760 5110	4.5 4.5	302 232						
9460	5	9	12092	4 - 1	500	1956 1957 1958	1 2 1	11590 12855 13110	3.7 4.0 4.3	434 514 569	1	11470	454	1	11064	407
						1959 1960	1	9760	4.4	507 407	3 1	11933	477 419	3	11005	45.5
9477.	3 2	ک	13755	4.0	548	1958 1959	, 1	14080 13430	4.1 3.9	573 522	1	11230 12030	452 498	1	12448	517
9 × 4 >	B 1	1	7610	4.3	326	1958	1	7610	4.3	320	1	10240	416	1	10431	427
10131	5 35	57	10784	4.1	444	1956	0	9043	4 - 1	369	1	10260	411			
						1957 1958	12 16	11629 12031	4.1 4.1	484 495	1	10400	419			
						1959 1960	19 4	11016 9675	4.2 3.9	40 l 303	11	7673	429 390	9	9630 9162	408 379
10180	7 1	1	11180	4.3	485	1959	1	11180	4.3	485	1	10290	413	1	10431	435
10187	0 1	1	7890	4.5	356	1959	1	7890	4.5	356	1	12430	512	1	12449	517
10329	7 1	3	8810	4.6	40੪	1959 1960	1	8610 9210	4.7 4.5	404 417	1	10840 10600	419 419	1	10431	435
10340	8 20	29	11102	4.1	460	1957 1958 1959 1960	9 12 	11551 12100 10964 10340	4.4 4.0 4.1 4.2	512 482 453 431	2 4 1	9910 9655 9430	406 38 7 384	3	8745 10420	358 427
10648	2 1	1	11670	4.0	467	1955	1	11670	4.0	467						
10791	5 61	90	11205	4.3	477	1956 1957 1958 1959 1960	2 11 26 37 14	13500 12383 11190 11456 9039	4 • 1 4 • 3	571 514 477 493 387	2 7 23 12	11510 11369 10910 10139	470 461 453 414	1 8 25 8	10540 11087 10728 10155	426 462 459 426
10090	5 ì	1	12460	4.0	493	1959	1	12460	4.0	493	1	11230	486	1	12797	524
11359	4 1	1	14710	4.5	656	1958	1	14710	4.5	656						
11588	1 1	1	14790	4.4	649	1957	1	14790	4.4	649						
11/12	5 2	3	10848	4.4	472	1959 1960	1 2	10440 11105	4.7	494	1 2	12550 108∠0	524 428	1 2	12590 11429	545 480
11933	D 1	1	10240	4 - 1	418	1959	1	10240	4.1	418	1	13790	559	1	12023	510
11956	5 2	2	10240	4.2	432	1960	2	10240	4.2	432	2	10580	418			
12022	6 3	3	10640	4.3	459	1958 1959	2	11065 9790	4.3 4.3	477 423	1	11670 12400	506 506	1	11035 11598	465 475
12044	8 1	1	14330	4.3	609	1959	1	14330	4.3	609	1	10190	445	1	10486	437

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIKL

SIRE NO.	DAUGHTERS NO.	RECORDS NO.	MILK	TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.	MILK		YEARLY HE RECORDS NO.		FAT
							AYRSI	HIRE								
46463	3 2	7	B905	4.1	360	1947 1948 1949	5 1 1	9168 8610 10760	4.2 3.9 3.6	38 1 333 387						
46502	2 3	15	9821	4.3	431	1949 1950 1951 1952 1953 1954 1955	1 3 3 2 2 2 2 1	12010 10107 11713 8660 6920 8145 8330 7800	4.6 4.5 4.6 4.3 4.6 4.2 4.2	549 449 503 396 296 350 353 330	2 2 2 2 2 1	10045 10320 9825 8420 9180 8610 8890	430 426 407 335 385 364 382	2 1	8840 9036 9363	366 376 389
51943	3 164	387	8966	4.1	365	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 4 26 39 46 60 72 43 27 28 22 15	11400 8475 9655 9037 8796 9060 8741 9416 9401 9449 9328 9465 9760	4.0 4.3 4.2 4.1 4.1 4.1 4.0 4.0 4.0 4.0	453 360 401 367 360 368 356 384 379 377 375 372 373	6 8 19 40 63 33 21 24 19 15 3	10962 9810 8583 9026 9213 9192 9442 9020 9448 9311 9560	428 382 342 361 374 379 381 374 391 370 380	6 56 30 17 20 16 14	8831 8733 9392 9087 9300 9596 10045	344 350 376 372 387 395 403 428
55033	3 61	136	8680	4.3	375	1951 1952 1953 1954 1955 1956 1957 1958 1959	13 31 30 22 11 8 6 3	8339 8874 9208 8566 8637 9704 8248 7933 8507 9055	4.3 4.3 4.2 4.2 4.2 4.3 4.4 4.2	355 386 397 357 364 408 353 348 356 421	5 19 26 22 11 7 6 6 3	10174 9717 9864 8626 8908 9147 8363 8665 7407 8343	441 408 410 359 360 370 346 363 291 333	15 14 10 6 5 6 3	8883 8948 9077 8822 8158 8687 7993 9663	378 379 370 363 340 360 316 394
57338	3 6	14	9855	4.0	387	1950 1952 1953 1954 1955 1956 1957	1 1 3 2 2 2 2 2	10930 8900 7690 8647 10915 10630 9375 10650	4.4 4.3 3.9 3.9 3.9 3.9 4.0	480 381 299 338 424 405 367 425	1 3 2 2 2 2	64 10 8400 10990 98 15 10400 11120	262 337 458 413 429 464	2 2 2 2 2	8121 9320 10377 11162 10660	329 390 426 457 429
5 9 5 1 5	6 61	199	9018	4.2	376	1952 1953 1954 1955 1956 1957 1958 1960	8 18 26 38 35 36 36 2	9576 9279 9652 9573 8455 9041 8510 9965	4.2 4.3 4.4 4.3 4.2 4.2 4.0 3.9	406 396 421 408 353 378 340 391	3 17 25 36 28 28 24	9497 8819 9957 8861 8211 9659 10514 9285	372 349 393 351 325 384 419 367	3 25 33 25 22 17	13331 9657 9976 10314 10453 8956 9641	501 385 400 409 399 362 393
901#r	95	187	8783	4.2	368	1954 1955 1956 1957 1958 1959	10 38 30 36 41 23	10665 9222 8946 8948 8408 8252 9927	4.1 4.2 4.3 4.5 4.2 4.1 4.3	434 384 381 383 350 342 429	9 27 16 29 34 23	9468 9012 9368 9186 9437 8979 8478	386 371 385 383 393 366 360	9 26 12 18 28 22 9	9008 9522 9536 9434 9549 9456 9005	377 388 373 399 392 395 380
6074	7 13	34	8490	4.0	336	1947 1948 1949 1950 1951 1952 1953 1954 1955	5 6 6 3 3 2 3 3 2 1	8450 8213 8297 8307 10133 9065 9617 8057 9135 6490	3.7 3.8	334 365	1 1 1 1 2 2 2 2 1	10350 8520 7790 7850 8410 9160 8855 8995 8600	309 325 366	1 1 2 1	8829 7881 8486 9385	307 341
6 14 98	3 1	2	8210	4.5	367	1950 1952	1		4.7							
62560	6	24	8586	3.9	330	1947 1948 1949 1950 1951 1952 1953	4 2 6 4 3 5 1	9363 8080 9020 9878 7727 10357 8930	3.9 4.1 4.0 3.7	365 327 359 359 264 360						
62636	5 214	413	8714	4.2	365	1953 1954 1955	1 42 74	8334	4.5 4.3 4.2	357	6 41 67	9533 8924 9359	395 371 389	4 4 1 6 7	9333 8983 8913	3/6

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGL	BY SI	₹Ŀ		R	ECORO AV	ERAGE I	3Y 51R	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECURUS NO.		TEST PCI.	FAT LB.	305-0AY (RECURUS NO.			YLARLY HE RECORDS NO.		
						1956 1957 1958 1959 1960	AYRS 68 55 86 60 21	9101 8784 8631 8802 9238	4 • 2 4 • 1 4 • 2 4 • 1 4 • 0	384 361 358 358 366	57 47 75 60 20	9250 8913 9423 8935 9643	385 366 384 364 386	55 42 62 59 20	9404 8993 9200 9259 9987	397 371 379 382 406
6 33 95	3	12	9429	4.1	378	1949 1950 1951 1952 1953 1954 1955	1 2 2 2 2 1 1	11750 9220 8360 7645 7190 8650 8390 8930	3.5 4.5 4.4 4.3 4.1 4.5 4.7	414 416 367 327 290 388 394 393						
634 17	3	3	8193	4.5	370	1950 1953 1954	1	9620 6380 8580	4.8 4.5	417 309 304	1	7830 9930	35 5 30 9	1	9123 8393	392 338
63426	2	7	10556	4.1	430	1951 1952 1954 1955 1956	1 1 1 2 2	10660 12240 11280 11430 9050	4.2 4.3 4.1 4.2 4.0	443 525 464 478 357	1 1 1 1	9470 8460 8320 10350 10210	399 371 359 447 427	 	8426 9472 10104	361 403 429
64908	26	59	7688	4.4	335	1950 1951 1952 1953 1954 1955 1956	1 16 17 12 5 3 1	8160 8064 7740 7938 7103 7683 7710 6680	4.4 4.5 4.3 4.2 4.1 4.3 4.2	355 359 336 344 300 315 330 2d3	1 7 7 8 8 8 3	9870 8481 8417 8070 7496 9913 9920	429 366 349 335 305 373 366 430	4 6 2 1	8480 7992 9238 8404 7281	375 319 356 360 308
66566	35	95	8598	4.4	377	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 20 21 16 9 7 6 6 3	10118 8868 8663 9285 10090 9181 9687 8220 7837 7375	4.5 4.4 4.4 4.4 4.4 4.4 4.1 4.1	452 391 382 405 448 403 416 359 325	2 11 17 16 9 7 6 6 6	9225 9347 6990 9453 9468 8670 9118 9225 3547 9040	399 384 36d 406 403 359 383 379 344 359	11 16 8 7 5 5 5	9204 9686 9608 8787 8866 6897 8825 9990	351 403 410 371 367 363 361 414
66820	1	1	0790	4.5	398	1954	1	B790	4.5	398						
67314	. 118	239	8292	14 + 14	362	1952 1953 1954 1955 1956 1957 1956 1959 1960	13 38 53 43 30 27 21 11	8492 8572 8668 8091 8196 8582 8523 7865	4.4 4.4 4.3 4.3 4.3 4.3	374 373 382 348 354 366 365 346 385	10 28 41 35 25 24 19 11	8967 8740 9245 8823 9366 9612 9837 9832 10217	367 351 374 355 381 398 410 406 410	13 40 35 22 15 16 10 3	8469 9111 9157 8850 9083 10106 10054 10301	344 367 368 361 373 412 427 406
67479	5	14	8536	3.9	331	1954 1955 1956 1957 1956 1959 1960	1 2 3 2 3 2	9040 9510 8050 9620 9647 7635	3.8 3.6 4.1 3.9 3.9 4.2	342 347 289 464 378 291 538	1 2 2 3 2 1	9310 8000 8330 8755 8773 9465 8700	357 353 347 367 360 383 359	1 1 3 2 1	9429 9341 6807 9225 9200 9293	364 368 361 378 369 390
67757	2	4	10442	4.2	434	1950 1952 1953	2 1 1	10645 10010 6770	4.3 4.4 4.3	45 I 439 268	1 1 1	8070 11910 8090	345 416 315			
68334	1	2	6440	4.1	262	1954 1955	1	6040 6240		267 257	1	6360 6670	261 26a	1	6442 6769	262 208
68482	32	82	8304	4.2	340	1949 1950 1951 1952 1953 1954 1955	3 16 14 20 14 12 1	9213 9106 8851 8228 7692 7940 10640 8610	3.9 4.3 4.2 4.1 4.1 4.3 4.2 4.5	359 392 366 336 317 338 450 379	1 6 0 12 12 11 1	8600 9280 9553 8050 8149 7921 6990 8820	384 404 404 350 345 336 303 371	3 7 1 2	8433 7854 8044 8687	372 321 341 366
70288	; i ,	13	9401	4.1	380	1951 1952 1953 1954 1955	1 3 2 3 2 2	7146 9487 11355 9995 10596 11575	3.0 4.0 4.2 3.6 3.7 3.7	273 379 480 376 397 432	2 !	7380 8760 8030	303 360 319	1 1 1	6534 10311 10649	287 408 420
7 10 32	2	5	6364	4.3	275	1953 1954 1955 1956	1 2 1 1	3490 7175 5960 5480	4.4 4.4 4.2 4.0	149 515 247 220	1 2 1	7470 8390 8530 8530	203 313 340 299	2 1 1	7826 10224 8687	295 391 342
72257	5	8	10158	4.0	414	1953	ı	10970	4.1	457	1	10550	435			

PENNSYLVANIA

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHLNING--RECORDS FROM THIS STATE ONLY

310

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	81 211	CL.		۲	ECURD AV	ERAGE I	A 21K	E BY	FKE2HENING	YEAK				
SIRE NO.	DAUGHTLRS NO.	RECORDS NO.		TLST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY (RECURDS NO.			YLARLY HI RLCOROS NO.	MILK	
						1954 1955 1956 1957 1958	AYRS) 1 2 2 1 1		4.4 4.6 3.9 4.3 5.8	615 605 383 422 373	1 2 2 1 1	11700 11055 8130 9540 6730	486 480 361 424 274	2	11739 11963 12764 13265 11162	507 509 562 574 461
7254	1	2	12310	4.5	550	1954 1955	1	11740 12880	4.4	514 586	1	11930	535	1	11739 12917	509 559
7265	1 1	1	9980	4.2	420	1954	1	9980	4.2	420	1	3560	430	1	8823	376
72686	5 334	744	8443	4.2	35 8	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 61 128 144 146 69 78 66 35	9350 8386 8413 8878 8675 8845 8556 8684 8368 8272	4.2 4.3 4.3 4.3 4.3 4.3 4.2 4.2 4.1	396 355 362 379 371 376 355 364 346 332	22 05 119 121 50 72 62 34	9282 9700 9708 9738 9605 9570 8989 8983	380 383 390 397 391 386 396 364 363	22 104 118 52 00 54 34	9473 9280 9627	400 374 395 392 378 395 300 417
73681	4 48	124	8864	4.3	380	1952 1953 1954 1955 1956 1957 1958 1959 1960	5 23 24 22 16 14 10 6	9218 9081 8783 9798 8386 8168 7978 9850 9985	4.5 4.4 4.3 4.3 4.3 4.0 4.1	413 404 302 420 362 346 322 410 417	4 22 23 22 15 13 9 6	₹678	378 386 364 378 385 350 399 337 371	10 18 22 15 12 5 6	8875 8368 9174 10156 10192 8988 8640 9167	373 348 376 413 403 367 367 381
7422	1	2	8555	3.8	326	1949 1951	1 1	10360 6750	3.9 3.7	401 251						
7422	3 2	6	10107	4.2	421	1955 1956 1957 1958 1960	2 1 1 1 1	10165 10580 10340 10220 8640	4.3 4.0 4.1 4.2	437 450 416 423 362	2 1 1 1	9950 9250 8810 8520 8000	420 387 350 357 322	2 1 1 1	8786 10344 10290 9995 9756	304 425 421 407 301
74434	1	1	9080	3.9	350	1958	1	908U	3. ∀	350	1	10500	453	1	11587	528
74535	5 10	11	9040	4.1	37 2	1957 1958 1959 1960	2 6 2 1	8030 9263 9555 10120	3.8 4.3 3.9 4.1	303 397 375 411	2 5 2 1	11130 9420 10160 10180	429 381 416 428	2 5 2 1	11293 10030 9963 10388	421 413
7491	1 1	2	8135	4.3	346	1957 1958	1	7120 9150	4.3 4.2	308 383	1	9730 9790	434 4 1 5			
7523	5 25	43	8879	4.0	356	1955 1956 1957 1958 1959 1960	3 7 12 12 6 3	8237 9336 9858 8609 8590 9480	4.0 4.3 4.1 4.0 3.9 4.2	332 395 397 344 332 393	2 3 9 4 6 2	9130 9833 9031 7961 7715 8565	351 393 373 334 318 346	2 3 7 9 6 3	9407 11590 9450 8651 8117 10115	465 34 354 357
7532	10	17	7 802	4.1	321	1951 1952 1953 1954 1955	6 3 0 1	7958 7037 7648 9560 8500	4.2 4.2 4.0 4.0 5.7	337 297 308 331 310	1 3	9710 9697 7500	411 399 443	1	9450	4.14
7557	7 28	80	8715	3.9	337	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	3 0 11 13 8 11 8 6 3 2 3	7273 9520 9161	4.3 4.1 3.9	307 380 361 361 356 321 353 376 314 298 304 339 314	2 5 6 10 7 6 3 2 3 2 2	10165 7744 9408 8847 8486 9197 6960 6443 8550 5960 10085	403 404 373 348 335 360 366 363 350 330 360 433	1 7 6 3 2 3 2 2	8589 8362 8771 3611 8077 9338 7625 10132	3×3 341 305 307 3×3 376 376 414
7581	5 4	9	8861	4.2	368	1954 1955 1956 1957 1958 1959	1 1 2 1 2 2	10930 8940 10790 11760 8920 7540	4.5 4.5 4.5 4.5	472 359 467 507 382 303	1 1 2 1 4 2	13070 13360 11255 9210 10265 12045	559 598 467 410 425 460	1 2 1 1	11/39 12917 11140 13265 9995 11870	507 547 470 574 407 511
7581	8 15	26	7947	4.3	337	1955 1956 1957 1958 1959 1960	ii ii 5 5 2 3	8575 7886 8222 8438 6554 7817	4 - 4 4 - 4 4 - 1 4 - 2 4 - 1 4 - 2	375 347 333 349 271 329	3 4 5 5 3	8793 8950 9254 9516 9554 7597	396 396 371 386 365 310	3 3 3 5 2	9233 9400 3415 9273 9595 3665	5 14 404 3 14 370 570 5 16
7650	7 35	101	8971	4.3	381	1950 1951 1952	10 14	9614 9659 9003	4.4 4.1 4.3	42, 391 386	2 3	9765 11163	392 45.4			

TABLE 15.--DAUGHTER-AVERAVE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EXEED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE DAUGHTERS RECORD NO. NO. ND.	S MILK TEST E8. PCT.	FAT FRESH LB. YEAR	RECUROS NO.	MILK Lo.	TEST PCT.	FAT Lr.	305-DAY RECORDS		FAT	YEARLY HE KELOROS	MILK	
		1753 1954 1955 1956 1957 1958 1959	AY 4.5	8596 7934 7170 10732 10398 8733 8322 2850	4.2 4.4 4.3 4.1 4.5 4.5 3.9	559 434 593 443 446 372 328 137	5 4 3 4 0	10438 10034 9710 10120 9205 9347 7800	407 393 387 406 392 334 314	5 2 2 3 5 5	9505 10284 9385 8557 10235 8422 7514	373 377 357 358 416 341 308
76572 10 18	8169 4.0	322 1950 1951 1952 1953 1954 1960	1 3 5 6 2	6980 10323 8554 8270 5760 8040	4.3 3.8 4.3 4.0 3.7 3.6	304 394 360 330 208 289	1 3 5 1	8320 6957 7972 10760 7970	341 276 314 383 304	! 1	11183 8437	435 348
76013 1 5	12096 3.8	460 1953 1955 1956 1957 1958	1 1 1 1	13030 13960 12330 10650 10510	3.7 4.1 3.8 3.7 3.7	484 575 463 391 588	 	9020 8710 8850 7350 8560	368 361 357 376 347	1 1 1	10311 10647 9843 9200	408 420 390 376
77130 11 17	8215 4.1	344 1952 1953 1954 1955 1957	8 4 3 1	8956 8605 7100 8850 5230	4.2 4.1 4.1 3.3 3.0	381 352 289 347 159	2 4 3 1	8625 8955 9913 8500 7830	340 362 406 330 317	1 3 1	10366 10079 11594 3415	307 377 444 343
77364 8 11	8825 4.1	359 1955 1956 1957 1958	9 2 4 2	9350 9720 8176 7780	4.C 4.Z 4.Z	378 406 337 309	3 1 3 1	9 1 3 0 9 1 3 0 9 3 1 0 9 3 1 0	354 401 418 435	3 2 1	9134 9407 9407	377 406 413
77874 17 30	8277 4.2	346 1953 1954 1955 1956 1957 1958 1959 1960	8 6 2 5 2 1	7509 8612 9167 8125 7678 9075 7280 10230	4.1 4.3 4.3 4.2 4.2 4.1	512 559 393 553 521 576 300 422	8 6 2 5 2	9149 10406 9710 8705 8618 8400 7510 8580	579 427 394 343 357 350 288 376	2 4 6 2 5 2	5622 10772 9661 8524 8522 7914 8611 9014	3c2 431 3c0 340 346 332 350 330
71942 88 172	8571 4 . i	353 1753 1954 1955 1956 1957 1958 1759 1960	31 32 22 24 27 17	8549 8679 8273 9316 8706 9104 8617 8066	4.2 4.1 4.1 4.1 4.1 4.2 4.0 4.0	356 357 344 386 256 380 240 324	9 31 32 22 24 27 17	9207 9383 9274 9713 10352 10779 9031 8569	389 384 387 405 445 357 347	5 29 28 19 22 22 16 10	9210 9310 9160 9449 9978 10073 9689 10275	347 329 378 387 346 406 388 410
782 1 4 15 23	8320 4.1	340 1955 1956 1957 1958 1959 1960	2 1 2 7 6 5	9205 7250 5755 9160 9430 8714	4.0 4.1 4.3 3.9 4.1 3.9	415 500 244 356 530 342	2 1 2 7 6	8985 6970 8525 9117 10662 10210	372 299 349 372 418 392	1 1 2 7 6 5	10791 6077 6273 9746 10542 10723	444 328 260 391 425 425
75927 3 14	9669 4.1	396 1953 1954 1955 1956 1957 1958 1959	1 2 2 2 3 2 2	9120 10995 8500 10775 9833 10515 11775	4.2 4.0 4.2 4.1 3.9 4.0	379 464 342 451 405 423 461	1 2 2 2 3 2 2	10720 9595 8850 9905 10147 9275 8835	446 405 367 408 414 399 369	1 1 2 3 2 2	12132 12579 11794 11743 10132 9516	461 407 474 403 445 400
79185 81 158	B928 4.1	370 1953 1954 1955 1956 1957 1958 1959 1960	1 11 28 29 32 31 15	11170 10256 9249 8986 8707 9318 8823 9655	4.1 4.3 4.1 4.0	495 424 389 372 370 384 352 378	1 9 24 21 24 27 14	10360 7869 7005 9591 9590 9335 9300 9333	370 387 390 388 386	9 20 19 14 21 12	9098 9746 9021 9425 9172 9706 9220	306 389 375
79374 2 2	14375 4.3	615 1959 1960	1	13400 15350		536 694	1	11620 11460		1	11870 1038n	
80167 19 32	9134 4.1	375 1956 1957 1958 1959 1960	2 3 12 9	9474	4.1	483 322 394 387 366	2 3 11 9 6	11155 8707 10673 9157 9198	407 366	2 2 10 9 5	10791 9183 10391 9944 9769	3/0 4 3 40
B 0 2 5 9 2 4	82/2 4.3	355 1954 1957 1958	2 1 1		3.9 4.6	278 267 436	2 1	8435 8480	317 323	2	7826 8251	295 315
80279 48 95	8280 4.2	349 1949 1950 1951 1952 1953	4 14 19 18 14			343 353 365 317 347	1 3 6 6 7	8790 9597 9042 8710 9183	352 334	3	9 309	34≯

PENNSYLVANIA 312

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING DRGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS ND.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	KECDRUS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY (RECORDS NO.			YEARLY HI RECORDS NO.	MILK	
						1954 1955 1956 1957 1958 1959	AYKSI 9 6 3 1 3 4	8714 8714 8583 7613 7860 10240 11225	4.2 4.1 3.9 4.2 4.0	363 361 294 306 432 453	9 5 3 1 3 4	9686 10110 11033 7720 9830 10570	389 391 417 295 378 421	7 5 1 1 3 4	8631 10015 13091 8567 9454 10775	338 390 512 354 357 430
8058	7 1	1	7260	4 • 0	294	1958	1	7260	4.0	294						
8146	4 10	38	9220	4.3	394	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 7 8 3 3 3 2 1 3 2	10377 8570 8486 9793 8877 9887 9840 8985 12230 6983 9865	4.4 4.3 4.2 4.1 4.1 3.9 4.0 4.0 3.9	452 364 360 395 365 389 397 382 493 272 388	1 1 2 2 2 3 3 3 2 1 3 2	8290 9100 8125 8295 8035 9050 9113 9385 9640 8430 9035	393 374 337 342 330 373 384 389 395 344 360	1 3 3 2 1 3 2	8600 9116 9119 9200 9581 8676 8649	349 371 383 383 405 358 344
B316	5 1	2	9760	4.1	396	1955 1956	1	9480 10040	4.1 4.0	386 406	1	11750 12010	449 471	1	11271 12328	416 434
71د8	2 3	6	11722	4.5	528	1956 1957 1959 1960	1 2 2 1	13110 12610 12020 10530	4.0 4.5 4.4 4.8	527 565 520 504	1 2 2 i	15890 11580 11390 9660	648 495 489 426	1 2 2 1	12764 13265 10927 10671	562 574 466 473
8462	9 11	38	9528	4.1	393	1950 1951 1952 1953 1954 1955 1956	3 8 8 6 3 1	10437 8865 10234 9353 8177 10710 9060 9150	4.3 4.4 4.3 4.2 4.1 4.1 4.0 3.9	449 387 438 389 337 437 361 357	2 (() () () () () () () () ()	10830 9330 9213 9199 7803 7967 7830 7940	465 401 394 391 328 349 323 310	5 6 3 1	8d92 7690 8229 7968 7859	332 325 347 329 324
8540	1 17	42	8638	4.2	359	1951 1952 1953 1954 1955	1 10 11 3 6	10960 9150 8770 8928 9492 7210	4.7 4.1 4.2 4.2 4.1	519 378 371 373 389 315	1 7 10 7 5	8454 8399 8444 8440	439 389 355 381 398	4 5 5	8636 8696 8432	375 371 353
						1957 1958	2 2	8190 7450	4.4 4.3	353 319	1	8640 10600	371 441	1	9505	414
8598.	2 1	7	9051	4.4	394	1959 1952 1953 1954 1955 1956 1958 1959	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9730 9910 8110 6420 9430 9660 10440 9390	3.9 4.3 4.6 4.5 4.5 4.4 4.6	339 426 370 289 429 426 420 401	1 1 1 1 1 1	7870 7230 10010 8200 9930 9410 8600 8980	319 271 385 317 422 392 350 350	1 1 1 1 1	7728 10126 7881 10344 9935 10562	
8639	0 2	3	9428	4.4	408	1957 1958	1 2	9520 8625	4.4	41s 572	1 2	12030 10125	473 429	1	10388 9592	411 404
8677	9 18	27	7970	4.1	321	1954 1955 1956 1957 1958 1959 1960	2 7 6 4 5	8060 9510 7330 9162 8255 7766 6990	4.1 4.5 4.1 3.9 4.2 4.0 4.1	325 414 296 360 341 306 284	2 5 6 4 5	9780 12200 9414 8665 9203 7920 9230	405 476 335 368 398 347 397	2 2 3 1 3 5	9592 11271 7325 11674 9225 9143 9123	370 416 313 426 395 338 385
8750	3 2	2	7145	3.9	271	1958 1959	1		3.8 3.9	350 212	1 1	9000	365 408	1	9995 10 7 04	407 401
880 <i>1</i>	9 4	12	7741	14 - 14	342	1953 1954 1955 1956 1957 1958	2 4 3 1 1	9210 8615 8650 9640 7200 6250	# • # # • # # • # # • #	407 376 351 433 314 208	 3 2 1 1	8400 9630 9165 8590 7260 8520	331 385 371 360 301 316	2 !	9216 9810 9527	414
8935	3 1	1	13270	3.3	439	1956	1	13270	د . 3	439	1	34.30	333	1	9995	407
8937	6 72	108	861à	4.2	364	1955 1956 1957 1958 1959 1960	1 19 39 23 13	8680 9210 8438 8655 8729 7979	4.2 4.2 4.2	352 392 356 575 569 535	1 7 16 53 27 13	8770 9231 8562 9283 9216 7946	377 374 340 378 372 322	1 5 14 28 20 13	8044 9468 8409 8900 9567 9898	341 400 344 363 374 405
9013	1 3	3	8460	3.9	328	1955 1958	2 1	8295 8790	4.0 3.7	330 326	2 1	9135 7050	385 28 7	2	7014	37%
9032	3 2	3	7558	4.2	314	1955 1958 1959	1 1 1	8350 6980 6550	4.1 4.2 4.1	346 293 268	i 1	7900 7410	325 309	-	7783 7946	325 337
9042	5 2	3	5173	4.5	227	1955 1956 1960	1	8940 9230 1260	4.3 4.3 4.7	389 400 39	!	8700 9030 4020	362 301 165	1	11009 7576	458 317

TABLE 15.--OAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

	LAUGHTER	AVERAGE	BA 21	RÉ		R	ECURD AVE	RAGE	BA 21K	E BY	FRESHENING	YEAK				
SIKE NO.	DAUGHTERS NU.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECUROS NO.	LB.	TLST PCT.		305-DAY C RECURDS MO.		FAT	YEARLY H RLCORDS NO.	MILK	
90489	60	74	04.4	h 2	7.,,		AYRSE									
9040		74	8033	4.2	366	1958 1958 1959 1960	6 22 31 15	8524 8810	4.4 4.3 4.2 4.2	413 367 367 342	5 20 31 15	9262 9012 8914 0099	389 373 362 322	2 20 31 15	9309 9508 9311 9134	
90536	5	21	9678	4 - 4	429	1953 1954 1955 1956 1957 1958 1959	1 3 5 4 4 2 1	12300 9396 9766 9628 8098 9420 8510 11480	4.4 4.5 4.5 4.0	577 412 442 426 353 390 326 458	1 3 5 4 4 2 1		465 410 402 399 461 396	3 4 2 2 2 1 1	9832 10123 9445 8851 10551 8960 12590	
91668	3 50	87	9283	4.2	392	1956 1957 1958 1959 1960	10 16 21 26 14	9802 0484 8863 9725 9946	4.2	417 357 374 408 414	10 16 21 26 14	10581 9033 9690 10075 10556	445 373 402 412 415	10 16 15 25 14	11115 8919 9637 10124 11114	457 366 400 418 441
91969) 16	37	8720	4.2	360	1954 1955 1956 1957 1958 1959	5 10 6 4 6 4 2	8660 8697 9260 9195 8817 9133 0320	4.2 4.1	357 300 393 375 361 361 324	5 10 6 4 0 4 2	9842 9649 8722 8360 9862 8365 8360	422 410 369 346 412 334 319	5 9 6 4 4 3 2	9450 9746 9358 8938 8968 8658 8334	399
92173	; 4	6	7059	4.1	290	1953 1957 1958 1959 1960	1 2 1 1	6240 7290 9680 7690 7100	4.3 3.9	258 300 414 298 289	2 1 1 1	7825 10410 8090 9210	335 432 319 370	1 1 1	5428 8622 9320	217 354 384
92543	67	154	8477	4.1	348	1952 1953 1954 1955 1956 1957 1958 1959	5 15 27 33 23 20 16 11	7866 8939 9320 8295 8891 9103 8801 8566 8193	4.1 4.1 4.1 4.0 3.9	321 373 381 342 361 366 345 330 309	3 11 25 28 23 20 16 11	7407 9352 10078 9623 9398 9641 9124 8768 9485	406 389 378 392 369 349	23 25 21 19 15 11	9300 9366 9713 9543 9511 9322 9947	365 394 379 370 374
93233	3 184	275	ذ068	4.3	369	1956 1957 1958 1959 1960	8 57 84 94 32	9043 9024 8673 8226 8408	4.4 4.∠	385 392 376 348 351	4 45 71 94 29	8940 9472 9053 9201 9401	364 396 377 371 378	3 21 61 93 32	8469 9239 9387 9372 10084	349 326 396 382 407
93478	3 17	36	8896	t4 ° t4	387	1953 1954 1955 1956 1957 1958 1959	8 7 8 3 3 4 1 2	9380 8626 8431 9767 11307 10510 7130 8715	4.4 4.3 4.3 4.1 4.4	413 376 365 413 463 457 332 400	7 6 5 3 4 1	9863 8513 9130 9200 8580 11438 14550 10180	544	3 8 3 3 4 1 2	9981 9325 9111 9523 9243 11720 14235 12677	374 410 378 454 542
94423	3 30	53	7691	4.2	319	1955 1956 1957 1958 1959	11 11 15 13 3		4.0	369 323 309 326 229	11 11 11 11 3	8478 8791 8456 9217 7950	310 343 386	11 10 11 10 3	8835 8494 8373 9059 8317	344 375
94900	7	7	5840	4.6	260	1959 1960	1 6	9980 5150	4.4 4.6	444 230	1 5	10130 7568	432 -30 T	1 5	10039 9546	
95368	5 14	22	7820	4 - 1	324	1956 1957 1958 1959 1960	1 4 7 5		4.2 4.0	326 339 367 282 245	1 4 6 3 4	12560 8770 9673 8522 6868		2 3 5 5	8279 8942 9335 8729	
95381	i 4	5	6445	4.0	262	1958 1959 1960	1 2 2	9270 8620 4360	4.1	394 349 175	1 2 2	8740 7220 6975	336 378 277	1 2 2	9995 10791 8508	467 435 354
95443	8 83	145	8972	4.2	380	1956 1957 1958 1959 1960	10 25 35 มู่ง 26		4.3 4.3 4.2	477 599 591 592 373	10 24 35 48 26	10235 9658 10171 10010 10089	411	10 17 29 47 26	10886 9644 9867 10255 10280	3/3 408 419
95808	3 17	23	9059	4.2	382	1958 1959 1960	5 11 7	8778 8945 9081	4.3	366 307 371	11 7	10545 10313 7534	443 421 384	5 11 7	9707 10100 10444	416
96526	5	9	7448	4.2	312	1955 1956 1957 1958 1959 1960	 1 2 2 2 1		4.2	420 325 256 336 320 335	 2 2 	8270 8960 9000 10670 8375 8480	426 429 348	1 1 2 1	7826 9112 11162 9478 9875	305 461

PENNSYL VANTA

TABLE 15.--GUAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANICATIONS--GROUPED BY BREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	KECOROS		TEST PCT.	FAI LB.	FRESH YEAR	RLCORUS NO.	LB.	TEST PCT.		SOS-DAY (RECORUS NO.	MILK		YLARLY HI RECUROS NO.		FAT
							AYKS	4) KE								
98561	3	9	7900	3.8	307	1957 1958 1959 1960	2 1 3 3	9210 9460 9110 6953	4.0 3.9 3.8 3.9	368 332 346 279	2 1 3 2	₹060 8460 ₹010 8945	370 355 364 360	2 1 3 3	9385 9734 8073 9051	375 423 352 367
9903	7 1	1	9120	4.2	387	1954	1	9120	4.2	758						
9921	7 4	7	8952	4.3	38∠	1956 1957 1958	2 3 2	11605 8343 7070	4.3 4.3 3.9	507 357 283	2 3 2	9525 9183 8610	4 18 399 360	2 1 2	8497 7576 8677	303 301 362
10152	7 2	2	10835	3.8	413	1959 1960	1	8440 13∠30	3.7 3.7	11د 514	1	9040 11860	35 I 42 I	1	10562 14813	
10260	1 1	4	11678	3.8	448	1956 1957 1958 1959	1 1 1	13260 11620 11660 10170	4.0 3.7 3.8 3.8	536 427 442 585	 	12170 11170 9370 10640	436 408 342 383	1 1 1 1	1457: 11173 10993 1063 i	340
10260	7 21	32	8530	4 - 1	354	1956 1957 1955 1959 1960	7 10 1	8928 9606 7964 7866 9030	4.2 4.2 4.1 3.7	507 406 533 522 544	4 5 10 7 4	10615 10882 6545 8619 8113	459 430 355 333 303	4 5 9 7 4	8868 9285 9106 8981 8944	367 368 375 357 357
10285	5 2	3	8318	3.8	303	1957 1958 1959] 	7340 6070 9930	3.9 4.2 3.4	287 254 335	1 1 1	9200 3790 8730	340 360 315	1	9494 10562	382 411
103230	0 13	20	8797	4.0	351	1956 1957 1958 1959 1960	2 6 5 3 4	10085 8575 9100 9573 8900	4.2 4.1 3.6 3.7 4.0	421 347 350 370 352	1 5 4 3 4	10190 9628 9205 8667 7798	427 363 373 358 326	3 3 4	10104 11225 8987 6422 8417	4, 9 4,53, 366 351 342
10372	7 13	23	B660	4.2	362	1957 1958 1959 1960	4 7 8 4	8370 8757 8179 8790	4 • U 4 • U	359 352 352 354	4 7 1 4	7895 9526 8794 9313	343 382 370 378	3 6 6 3	7641 10924 9222 9043	323 436 361 389
10476	8 1	1	11090	4.1	453	1959	1	11090	4.1	¥ 5 3	1	11000	434	1	10170	463
10510	5 148	259	9152	4.1	379	1954 1955 1956 1957 1958 1959 1960	10 45 34 50 48 50 22	9568 8952 9481 9126 9520 9395 9044	3.9 4.1 4.2 4.2 4.1 4.1	372 367 398 386 395 385 385	10 40 27 48 45 50 22	7428 8966 9089 9729 10230 9758 9601	363 350 412 402 416 392 385	8 38 19 39 30 48 21	8761 9520 9758 9615 9772 9915	351 362 411 390 401 402 418
10572	1 5	6	7363	4.0	288	1957 1958 1959 1960	1 2 2 1	3340 11680 4330 8970	4.2 3.9 4.0 3.6	139 457 171 323	1 2 2	8690 10055 6045 3150	389 430 247 337	1 2 1	3641 10960 8262 9483	152 479 318 346
10062	0 2	2	7175	3.9	277	1959	2	7175	3.0	271	2	7495	296	2	(995	316
10669	6 1	1	11490	4.0	464	1960	1	11490	4.0	464	1	12310	444	1	13233	484
10/86	9 1	2	9285	4.5	414	1959 1960	1	9160 9410	4.0	419	1	8630 10030	361 413	1	9330 9712	3₹0 401
10867	0 3	5	7532	4.1	313	1958 1959	2 3	7755 7 180	4 - 1 4 - 1	316 301	2 3	8640 7473	345 313	1 3	8873 8313	396 338
10904	9 12	19	7902	4.3	338	1957 1958 1959 1960	4 9 5 1	8045 8738 8226 5780	4.2	341 368 379 296	4 8 5	8238 9415 8066 5640	346 390 385 211	4 7 4 1	9611 9355 9865 9232	399 381 415 408
11081	1 5	5	9396	4.4	418	1958 1959 1960	1 3 1	8520 9327 10480	4.2	421 395 481	1 5 1	11500 7800 9330	442 307 395	1 3 1	9875 7826 9232	378 315 408
11132	1 22	28	9281	4.3	399	1958 1959 1960	5 17 6	10078 9125 10145	4.2 4.2 4.4	427 368 442	5 17 6	104c4 9385 10712	448 384 434	5 15 6	10172 9793 11314	421 399 448
11202	5 29	37	9256	4.1	382	1957 1958 1959 1960	2 8 13 9	8865 8343 9466 9867		422 346 336 397	2 7 18 9	9620 9771 10082 9860	408 405 407 405	2 7 17 9	9930 9810 10177 10144	426 407 417 414
11210	7 21	27	8131	4.5	361	1958 1959 1960	6 11 10	8175 9298 7833	4.5 4.4 4.3	373 408 330	11	12072 9752 9569	486 400 387	5 9 10	10754 10297 9717	419
11295	6 7	7	8979	4.3	389	1959 1960	1 6	7410 9240	4.6 4.2	338 398	1	8560 9304	3 38 385	1	7728 10375	313 425
11323	0 3	4	8333	4.5	360	1959 1960	3 1	8083 10810		349 474	3 1	8470 11950	33 <i>1</i> 490	2	7728 13527	

PENNSYLVANIA

315

TABLE 15.--DAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

RECORD AVERAGE BY SIRE BY FRESHENING YEAR

305-DAY CONTEMP. AV. YEARLY HERD AVERAGE
SIRE DAUGHTERS RECORDS MILK TEST FAT FRESH RECORDS MILK TEST FAT RECORDS MILK FAT RECORDS MILK FAT
NO. NO. NO. LB. PCT. LB. YLAR NO. LB. PCT. LB. NO. LB. LB. LB.

AYRSHIRE

PENNSYL VAN I A

TABLE 15.--GAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY GREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY STRE RECORD AVERAGE BY STRE BY FRESHENING YEAR

316

	OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR															
STRE NO.	OAUGHTERS NO.	RECOROS NO.		TLST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.	FAT LB.	SOS-DAY C RECORDS NO.	MILK	FAT	YEARLY HE RECORDS NO.		FAT
							GU∈R:	NSEY								
1924 78	3 1	1	84/0	4.4	369	1951	1	8470	4.4	369						
198531	2	3	6363	4.4	284	1949 1952 1953	1 1 1	7360 5280 5450	4.5	342 238 211	1	4920 5430	272 203			
209799		37	8080	4.8	391	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	10 7 4 2 2 1 2 2 2 2 2 2	8085 7157 8068 8450 9025 9145 8400 8790 9795 7765 8345 8120	4.8 5.3 5.0 4.5 4.8 4.9 4.9 4.9	406 343 371 449 454 416 404 426 470 381 392 412	2 1 1 1 1 1 2 2 2 2	7345 9700 7680 7510 6670 9040 8210 9070 8415 8470 8570	352 345 297 397 381 418 411 398 390	2 2 2 1 1	7631 9036 9113 8829 9309	
210435	2	9	9926	4.7	462	1947 1948 1949 1950	4 3 1	9783 9447 11766 10510	4.8	459 438 562 471						
211212		10	7163	4.2	296	1947 1948	8 2	7078 7130	4.3 4.1	298 289						
224915		ğ	7900	4.5	356	1949	1	7900	4.0	356						
226105	i 3	6	8365	† • †	363	1947 1948 1949 1951 1952 1953	i i i i 1	6780 5750 7910 10630 10670 11460	4.3 4.3 3.8 4.2	317 248 339 408 443 552	1	11520 9330 10150	518 456 490			
226497	1	2	6355	5.7	361	1948 1949	1	6890 5820		426 296						
227122	2 21	61	7510	4.9	368	1947 1948 1949 1950 1951 1952 1953 1954	5 11 14 8 11 6 3 2	7650 8497 8308 8065 7896 7257 7903 8630 8600	4.9 5.0 4.8 4.7 4.3 4.5	368 412 413 389 381 340 343 386 378	1 1 2 3 3 3 3 2	11490 10520 9515 9500 9413 8627 8445 9780	496 451 458 448 397 399 453	2	7984 9287	392 436
227790) 1	5	10048	4.5	448	1950 1951 1952 1953 1954	1 1 1 1	11320 11150 9790 9180 8600	4.5 4.6 4.8	475 504 447 439 373	1 1 1 1	9630 9610 9510 8850 8960	450 424 455 414 416	1	9221	446
228454	48	115	7568	5.1	381	1947 1948 1949 1950 1951 1952 1953 1954 1955	2 13 20 25 19 13 10 9 2	7370 7885 7392 7621 7855 8028 8195 8737 9255 9120	4.9 5.3 5.2 5.2 5.0 4.9	369 385 390 395 407 401 405 425 452 427	1 3 3 7 8 9 9	9520 10663 7907 8530 8088 7942 9000 9860 8050	479 480 389 404 396 374 409 491 389	2 8 1	8257 8469 8340 6818	404 402 447 432
228716	6 0	168	7635	4.7	355	1947 1946 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	1 12 25 28 22 22 20 16 11 5 3	9390 7631 8325 7884 7799 7726 7729 8396 7626 9236 7607 12510	4.8 4.7 4.6 4.5 4.3 4.6 4.2 4.6 5.0	445 360 400 369 360 347 345 361 347 391 344 626 476	2 5 9 10 15 18 16 11 5 3 1	9470 10763 9624 9014 8648 7973 8237 8215 9040 8593 8990 8335	457 503 400 391 378 351 371 381 391 376 421 383	16 10 4 2 1 2	7616 8189 8113 9742 8530 9080 9129	328 370 377 414 373 446 441
22971	1	1	4890	4 - 1	202	1947	1	4890	4.1	202						
23120	2 2	3	5323	4.5	238	1947	3	5357	4.5	241						
23137	5 6	15	6835	5.2	352	1947 1948 1949 1950 1951	5 2 1 2 3	7820 7095 7600 5745 5710	5.0 5.2	414 358 423 304 289	2	7240 6930 7740 7150	359 352 351 328			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER				KUS FR		STATE ON		Y SIR	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NU.	RECORDS		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY RECORDS NO.			YLARLY H. RECORDS NO.		FAI
						1952 1953	GUERI 1 1	NSEY 6620 7170	5.4	361 376	1	7290 8∠50	306 347			
23538	1 31	135	7710	5.0	380	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	6 11 19 16 16 21 16 13 7 4 1	7154 7549 8197 7350 7239 7522 7898 9394 9056 8485 8770 5860	5.1 4.8 5.0 5.0 4.8 4.6 4.6 4.7 4.5 5.0 5.0	356 365 411 364 358 560 378 439 424 584 440 324 514	1 5 10 8 10 15 15 15 14 1 1 2 1	7990 8096 8542 8771 8349 8811 8366 8682 8530 8878 7160 8150 9050	559 395 411 406 381 404 589 412 409 436 549 392 448	6 11 5 4 1 2	9558 8262 8777 9034 8622 8121 9485	442 387 410 446 434 306 441
237383	3 [1	5380	4.2	224	1948	1	5380	4.2	224						
24187	1 12	37	70 15	4.8	333	1950 1951 1952 1953 1954 1955 1956 1957	9 7 6 5 3 1 2 3	7061 7634 6858 7714 7943 5800 11605 3733 7550	4.8 4.7 4.0 4.6 4.6 4.1 4.3 4.2	338 353 320 351 382 265 481 374 320	4 6 4 5 3 1 2 3	8025 7808 7538 7366 7727 8170 8325 6550 7140	397 374 366 364 375 371 409 315 361	1 3 1 2 2 1	8284 7267 7379 7657 7783 7194	423 338 338 373 350 359
243870	0 1	1	15350	4.3	660	1959	t	15350	4.5	666	1	86 30	437	1	10192	5∠3
244132	2 1	8	7041	4.7	327	1947 1948 1949 1950	5 1 1 1	7064 6410 7570 7030	4.8 4.4 4.3 4.3	341 282 327 301						
244147	7 1	1	6120	4.8	296	1950	1	6120	4.0	296						
∠45488	3	Łą.	6778	4.3	295	1947 1949 1950 1953	 	5230 7590 7740 7440	4.2 4.8 4.8	219 365 369 300	1	9640	377			
246072	2 77	229	728/	4.6	335	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 22 42 44 36 26 21 18 3 2 3	9750 7114 7324 7556 7240 7588 7975 7447 8116 6667 8785 7680 7270	4.4 4.7 7.4 7.0 7.0 6.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	425 324 342 352 335 347 356 331 369 316 421 377 318	5 10 16 16 17 19 18 8 3 2 3	8232 8600 9124 8326 8782 8493 8211 8651 8777 9090 8193 6920	382 408 427 401 404 401 390 398 418 445 401 306	5 17 8 3 2 3 1	8434 8197 9156 9846 10083 9436 8033	464 390 475 478 505 467 384
2466 12	2 49	109	7547	4.8	357	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 18 27 16 12 11 9 7 5 2	8270 7202 7973 7577 7645 7415 8380 8479 7950 7850 7720	4.8 4.9 4.8 4.7 4.6 4.7 4.6 4.5 4.5 3.9 3.8	399 352 378 353 355 349 377 379 352 300 293	1 5 6 5 7 7 7 5 2	8020 8300 8063 7166 7873 7443 7534 7528 8045	399 419 402 337 368 358 356 352 365 347	3 6 5 2 1	7837 7714 8441 9647 8415	363
24909t	4 16	52	8088	4.5	363	1946 1949 1950 1951 1952 1953 1954	1 10 10 11 8 7 4	9660 8223 7736 8237 7801 8237 8553 5470	4.6 4.4 4.5 4.5 4.5 4.5 5.1	440 375 336 367 334 369 380 277	1 3 3 3 3 4 2	10140 11420 11147 10750 10347 10023 9955	373 406 382 393 375 372 370	2	10284	368
249227	7 231	682	7708	4.9	375	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	21 59 111 108 112 94 69 40 29 13 13 13	8145 7544 8042 7761 7957 8096 7835 8602 8757 8135 8900 8198 6030 5795	# + + + + + + + + + + + + + + + + + + +	400 369 393 373 383 389 331 415 420 396 410 374 268 276	2 7 17 29 45 51 56 37 25 12 12 7 3	8020 7944 10157 2097 2076 8550 8586 8686 8614 2188 8777 6541 8050 6950	431 378 468 429 413 401 394 410 410 414 384 390 333 327	18 34 24 11 12 7 3 2	8567 8197 8678 9302 9183 8782 3764 7930	385 408 420 414 397 369
25016	1 7	23	6999	5+0	34 8	1947 1948 1949 1950	կ կ 2	6395 6115 7578 9090	4.8 4.9 5.0 4.5	296 302 377 410	I 1 2 2	56n0 6570 8065 3325	2// 312 393 392			

PENNSYLVANIA 318

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKL NO.	OAUGHTERS NO.	RECORDS NO.	MILK LB.		FAT L8.	FRESH YEAR	RECOROS NO.	MILK L8.		FAT L8.	305-DAY (RECOROS NO.			YEARLY HE RECORDS NO.	RO AVE MILK L8.	
						1951 1952 1953 1954 1955	GUER? 2 2 2 2 1	8915 7715 9200 9485 8310	4.6 4.6 4.8 4.7 4.7	411 352 434 446 394	2 2 2 2 2	7165 7040 8115 8160 7110	343 342 383 407 342	2 1	8328 7488	40 I 35 I
253178	3 2	9	9117	4.4	399	1950 1951 1952 1953 1954 1955 1956	2 1 1 1 1 1 1 1 1 1 1 1	9975 5690 9540 11490 7020 8160 9610 8810	4.5 4.8 4.3 4.6 4.7 4.2 4.1	450 255 460 493 324 386 408 362		7570 8720 11930 11400 11220 9870 11170 10530	342 377 474 461 443 364 400 360	1 1 1	11064 10933 9821 11096	443 440 396 428
253411	4 42	120	7453	4.7	351	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	22 18 21 18 16 10 5 4 4	7834 8093 7881 7860 7793 8766 8504 8470 8213 6005	4.7 4.9 4.7 4.6 4.6 4.7 4.5 4.4	369 389 373 358 359 410 378 370 390 294	8 10 17 16 15 10 5 4 3	9555 9332 9739 9076 8866 9107 9696 9320 9113 9550	426 420 418 390 395 428 442 430 413	5 14 9 5 4 3 2	7390 8978 6532 10059 9077 10188 9881	337 398 390 450 444 444
25378.	3 1	10	8539	4.3	368	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 1 1 1 1 1 1	8340 8310 10050 7320 8640 9210 8520 9020 7600 8380	4.4 4.5 4.4 4.2 4.2 4.3 4.4	367 374 440 313 365 390 370 392 337 335	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9040 8150 8570 8660 8720 8930 8440 8570 7870 9310	396 399 409 411 398 406 389 420 348 454	1 1 1	9036 9069 8339 8894	415 424 405 422
25424.	3 22	82	7191	5.0	356	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	1 7 10 11 12 9 11 9 5 2 4	7790 7047 7408 7267 7619 7137 6525 6817 7284 7880 7545	5.0 5.3 5.1 4.8 4.8 5.0 5.0 4.9 5.0 4.5 5.6	388 373 379 347 367 353 329 331 368 358 358	4 4 6 6 10 8 5 2 4	8298 8548 8313 8467 7188 7169 7431 8188 8990 8053 7290	356 374 340 375 329 321 346 401 411 364 353	8 7 4 1 2 1	7869 6950 7944 9102 11647 8175	360 325 382 426 546 410
25844.	3 11	33	7704	4.8	370	1950 1951 1952 1953 1954 1955	5 7 8 5 3 2 3	7378 8364 7948 8524 10363 9415 7510	4.9 4.8 4.9 5.0 5.0	360 409 383 418 512 468 360	2 1 4 3 2 3	11615 7520 9205 9155 9463 9010 8380	462 333 418 416 455 425 391	3 2 3	9843 10388 7979	459 471 395
25898		1	9610	4.0	386	1947	1	9610	4.0	386	0	0176	770			п
25908	8 149	396	7979	5.0	395	1952 1953 1954 1955 1956 1957 1958 1959 1960	10 60 72 70 50 52 42 28 12	6763 7645 7910 8358 8054 8228 8487 8254 9096	5.0 4.9 5.0 5.0 5.0 4.9 4.8	334 375 397 417 404 409 416 397 446	8 57 72 70 49 51 36 28	8134 8377 8599 8517 8478 8536 8584 8595 8368	372 384 404 399 399 405 405 390 388	17 64 62 48 35 31 27	8425 8146 8878 8486 8589 9117 9215 9282	385 383 418 414 408 435 424 431
26188	4 2	3	9408	5.0	466	1953 1954 1955	1 1 1	8940 8110 10290	4.6 5.4 4.9	413 437 506	1	8420 7720	387 400	1	8676	419
26 19 6	6 196	521	7200	4.9	351	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	7 29 58 86 72 80 69 50 27 11 9	6087 6870 7262 7598 7781 7476 7620 7782 7972 8017 8210 8596 7053 8540	4.8 5.0 5.0 4.9 4.8 4.8 4.8 4.8	291 342 360 372 381 361 357 373 381 383 401 413 328 420	1 3 10 26 31 43 54 48 26 10 9	6830 6153 8910 8170 8506 8293 8538 8219 8333 8992 8579 8406 7530 7930	321 377 416 393 404 387 385 380 388 420 413 399 350 375	18 45 26 10 3 8 8	8606 8087 8372 8679 9102 8720 8080 8796	390 375 396 415 433 411 375 433
26238	4 1	Ą	13365	4.2	555	1949	1	17970	4.2	756	1	14070	654			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	RECURUS NO.			YEARLY HE RECORDS NO.		FAI
						1951 1953 1955	GUERI I I I	16780 11140 7570	4.1 4.0 4.3	692 446 324	 	12620 9150 8780	551 422 447	1	8785	449
26242	0 1	1	7740	4.7	364	1953	1	7740	4.1	364						
26248	5 1	4	9765	4.8	471	1949 1953 1955 1956	1 1 1 1	10186 10260 9630 8990	4.8 4.9 4.9	488 505 469 420	 	10570 8310 7670 8280	525 387 363 402	1	8306 8393	399 403
2625 1	4 5	11	7820	4.6	362	1948 1949 1950 1951 1952	1 3 3 1 3	8250 8093 8780 7730 7730	5.0 4.7 4.5 4.7 4.4	411 380 393 361 342	1	1100	35 I			
26315	1 147	483	7654	5.0	382	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	34 46 72 78 74 59 36 28 26 16	7681 7269 7923 7691 7576 7924 8169 8239 8314 8146 9391 7410	5.1 5.0 5.1 5.0 5.1 5.1 5.0 5.0 5.0 4.8	387 364 402 387 378 403 415 410 415 408 447 341	13 21 41 52 62 54 33 26 26 14 9	8312 9131 8402 8492 8150 8415 8537 8557 8289 8429 8429 7104	390 428 393 395 381 394 401 406 400 392 398 322	17 51 32 25 19 14 9	9084 8274 8760 8780 8199 9197 9054 9237	422 392 414 417 395 433 438
26340	4 11	26	6732	4.8	322	1950 1951 1952 1953 1954 1955 1956	5 / 4 2 2 1 1	6252 7337 6655 6685 7665 5800 7910 7520	5.0 5.0 4.9 5.0 5.0 4.9 4.5	320 357 320 331 379 282 357 343	1 3 2 1	9180 10970 10280 6460 13730	415 479 462 306 538	1	11968	491
						1958 1959 1960	1 1 1	7130 5570 5860	4.7	333 255 257	1	5910	282	1	5930 7521	
265148	3 2	Ц	7789	4.8	371	1948 1949 1950 1951	1 1 1	7010 7280 8480 7000	4.2 4.7 5.0 4.6	298 339 421 325						
26647	1 261	627	8096	4.6	374	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 30 80 76 70 84 75 74 53 26 13 20	8375 7875 8338 8255 8551 8175 8393 8320 8409 9133 9192 8452 7689 8370	4.68	402 361 395 382 393 377 387 388 406 405 378 349 366	1 13 18 28 50 69 73 52 25 12 15	8770 9404 9054 8656 8243 8188 8561 8894 9135 9088 8681 7844 8333	441 433 415 412 389 374 397 409 416 415 392 358 394	24 67 45 22 12 14 9	8499 8498 8860 9386 8991 9206 9326 9112	398 396 405 428 418 417 435 428
26720	0 73	181	7317	4.7	345	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 18 32 34 28 19 12 12 12 8 7 6 3	6630 7569 7271 7491 8219 7835 8159 7223 8066 6806 7482 7110	4.9 4.8 4.7 4.8 4.7 4.6 4.5 4.5 4.5	325 366 345 362 387 364 367 323 340 315 341 330	5 13 17 16 12 10 7 7 7 6 3	8778 9785 9457 9036 9253 9441 9370 8521 8462 7943	389 370 363 384	9 9 10 8 7 6 3	9178 9473 9224 9363 7605 9683 8411	411 398 384 351 414
26740	3	3	7877	4.5	353	1949 1952	2 1	7540 8550		351 399						
26753	2 11	27	7791	5.0	389	1947 1948 1949 1950 1951 1952 1953	7 5 3 1 4 3 3	7780 6906 8133 5680 9718 7270 7947 8830	5.3 4.9 4.8 5.4 4.8 4.7 4.6 4.2	409 335 386 304 456 343 373 368	2 2 2 2 2 3 1	7385 8990 10315 10145 8075 9183 8590	387 421 463 437 353 408 348	3	8393	389
27069	4 11	27	7135	4.8	343	1951 1952 1953 1954 1955 1956 1957 1958 1959	3 9 3 4 3 1 1 1	7397 7229 7177 7670 7603 7110 5990 6470 7735	5.0 4.9 4.7 4.4 4.4 4.1 4.1	363 350 337 334 333 340 247 262 334	2 4 3 4 3 1 1 1 2	9290 8935 8590 7833 7620 8690 4650 4870 7085	421 214 231	4 3 1 1 1 2	8197 6039 4927	378 399 286

PENNSYL VANTA 320

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHLNING--KECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY 516	RE		R	ECORU AVE	RAGE B	Y 51K	E 8Y	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY (RECORDS NO.		FAT	YEARLY HE KECORDS NO.	MILK	
							GULRI	NSEY								
27 50 47	22	51	7341	4.6	336	1949 1950 1951 1952 1953 1954 1955	2 15 13 9 6 3	7530 7621 7184 8154 7143 7123 5950	4.7 4.5 4.7 4.5 4.5 4.5	353 345 337 364 320 314 248	2 3 3 5 3	7810 7517 7990 7666 8050 7503	394 359 382 378 407 375	1 3 3	8622 8644 8466	433 429 421
273228	3	5	6847	5.0	346	1947 1948 1949 1954 1955	1 1 1 1	4640 8930 7920 7960 6990	4.7 5.5 5.4 4.8 4.9	218 491 425 381 342	1	7820 6200	368 294	1	8578 8044	412 398
273849	1	1	9540	4-6	441	1952	1	9540	4.6	441						
274127	, 6	19	8937	4.6	412	1947 1949 1950 1951 1952 1953 1954 1955	1 1 3 3 1 2 3 2	8560 10300 9910 9867 7410 6580 9347 8685 9550	5.1 4.5 4.5 4.5 4.6 4.5 4.4 4.7	436 468 445 442 342 290 414 407 435	2 2 1 2 2 1	8050 8890 9220 8185 8185 9450	374 422 436 389 388 477	2	7816 8142	379 316
						1957 1958		7800 8560	4.6	359 398	1 1	9060 10360	436 501	1	8785 8873	436 436
275061	3	5	7394	5 • 1	369	1947 1948 1952 1953 1957	1 1 1 1	5930 7690 6450 7230 9130	5.7 5.2 5.1 5.3 4.4	338 398 327 386 399	1	9610 7610 6970	414 386 345			
275969	1	3	6803	5.0	331	1947 1949	2	6495 7420	5.3	335 325						
276386	1	3	9820	4 . 4	431	1950 1953 1954	1	9110 10360 9990	4.2 4.5 4.4	385 463 444	1 1 1	7250 8380 8600	350 401 428	1	8916	425
276772	1	1	6180	4.3	263	1954	1	6180	4.3	263	1	8700	413	1	7652	365
271462	1	6	8167	4.6	378	1947 1949 1950 1951 1952 1953) 1 1 1 1	8480 8670 8500 6500 8090 8760	4.7 4.7 5.1 4.6 4.5 4.2	398 409 435 299 361 364	1 1 1 1 1	11210 12700 11140 12030 11630 10400	531 522 495 488 446 410			
2775 66	1	1	8670	5.0	432	1947	1	8670	5.0	432						
278053	69	174	7140	4.7	331	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 32 37 30 29 16 11 7	8975 7353 6714 7297 7524 7801 8451 7589 8369 4270	5.1 4.7 4.8 4.9 4.8 4.6 4.7 4.5 4.5	450 346 323 356 360 356 393 337 376 172	2 20 30 26 28 15 11 6 9	11115 8732 8664 8731 9249 8897 8653 8495 8623 7810	508 390 384 398 433 416 418 397 404 377	11 23 28 14 8 5	8330 8659 9044 9280 8518 8151 9239 9614	379 390 423 427 403 395 455 456
278150	37	112	7635	5.0	378	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	4 11 21 19 18 18 10 4 4 2	7120 7336 7802 7602 7861 7857 9461 9468 9198 8120 8550	4.9 5.0 5.0 4.9 5.0 4.8 4.9 4.8 5.2	341 358 387 380 384 387 469 458 447 395 445	5 4 7 8 7 3 3 1	8484 8438 8213 8518 8673 9663 8647 8320 7920	407 421 389 380 393 417 372 413 394	3 3 3 1 1	8092 8629 9301 8066 8339	393 364 412 412 41 <i>f</i>
278267	30	68	7461	4.5	3 30	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	1 6 16 12 12 7 3 5 2	4380 6300 8162 7233 7968 9237 9190 7618 9790 9820 7567	4.2 4.5 4.7 4.6 4.3 4.1 4.2 4.2 4.0 4.5	184 285 371 334 344 309 374 312 389 425 337	1 2 3 2 3 3 2 1 3	14840 10585 8750 8840 8307 8830 8855 9310 7583	543 453 402 407 387 393 387 449 357	2 3 2 1 3	7587 8745 8927 9941 7245	380 390 382 488 353
281258	3 1	1	9530	4.4	423	1949	1	9530	4.4	423						
281853	3 20	51	7412	4.8	354	1949 1950 1951 1952 1953	8 6 8 11 6	8526 7855 7410 6769 7262	4.9 4.6 4.8 5.1 4.8	416 360 354 339 346	3 2 3 6 6	8220 9635 8123 8330 7875	385 522 424 387 384	2	8682	446

288783

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTEK				RDS FR		STATE UNI		Y SIR	L BY	FRESHLINING	YLAK				
SIKE Nu.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS	MILK L8.	TEST PCI.	FAT LG.	SOS-DAY RECURUS NU.	MILK		YEARLY H		FAI
						1954 1955 1956 1957 1958	GUERN 4 1 2 1		5.0 4.7 5.1 4.8 4.5	327 353 404 317 317	4 4 1 2	7968 7660 7310 7025 7590	368 351 354 339 357	4 4 1 2 1	7949 7938 8251 7004 7510	380 350 401 355 363
28190	1 178	466	7488	4.8	357	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	13 27 40 75 99 69 60 29 20 16 17	8230 7242 6945 7586 7591 8014 8142 7910 8054 8381 7836 11230	4.9 4.0 4.0 4.0 4.0 4.7 4.0 4.7 4.0	398 351 334 365 361 366 384 383 382 393 362 466	12 17 144 91 68 60 28 20 15	9878 9051 8548 8129 8313 6706 8678 8250 8663 8793 8910 9113	416 382 386 381 401 401 394 402 393 387	29 o3 57 26 16 15 17	8194 3606 8793 8648 8038 8961 9432 9628	397 405 422 379 408 417 450
28275	9 3	6	7432	4.5	333	1948 1950 1951 1952	1 1 3 1	7160 6425 7570 6430	4.4 4.2 4.4 5.1	312 272 336 331						
28310	9 5	18	8384	5.0	416	1952 1953 1954 1955 1956 1957 1958 1960	1 3 3 4 1	4350 6430 9257 8923 10245 9823 7940 12420	5.0 5.1 5.2 5.0 5.1 5.2	245 289 458 452 532 490 400 646	1 1 3 3 2 3 3 1	86 50 85 50 87 73 9000 103 65 100 70 83 77 96 60	407	1 2 3 2 2 2 2	8698 9995 9047 9407 9363 8437	443 496 439 473 476 416 487
285933	3 2	7	7815	4.5	354	1948 1949 1951 1952 1953 1954	1 1 1 1	7770 7940 7340 9780 7420 8550 5280	4.6 4.7 4.4 4.3 4.1 4.2	371 374 322 419 307 359 221	1 1 1	9340 3390 8390	345 317 347		10148 10039	
28693	7 1	1	9470	4.1	389	1949	1	9470	4.1	369						
28 70 51	4 1	i,	7398	4.7	348	1948 1950 1951 1952	1 1 1	8730 8130 6230 6500	4.9 4.9 4.9	401 376 303 290						
287309	9 147	296	7459	4.9	363	1952 1953 1954 1955 1956 1957 1958 1959 1960	11 43 55 59 31 29 37 25	8107 7240 7451 7914 7868 7630 7689 6789 8393	4.0 4.9 4.9 5.0 5.0 4.8 4.7 4.7	374 355 366 393 390 364 379 318 387	5 40 49 58 27 29 26 25	8560 8570 8768 3911 9230 9435 8927 8710 8063	389 385 399 421 428 446 431 41G 393	15 47 53 23 22 26 22 6	8357 8737 8738 9387 9140 8963 8969 8260	383 401 408 437 434 430 434
28731	N 86	262	7501	4.8	360	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	13 31 45 44 40 30 24 10 12 6	7947 8132 7705 8310 8031 8337 7982 7692 8093 7518 9158 8775	4.8 4.8 4.8 4.7 4.6 4.5 4.5	363 396 566 401 582 390 577 353 367 342 411 578	4 10 22 30 34 30 23 10 12 5	8878 9172 8602 8773 8161 8560 8570 8172 8868 7608 7722 9435	389 394 400	7 27 20 9 11 5 5	8381 8266 8475 8662 8833 8350 8783 9396	402 393 406 414 408 380 408 412
288068	В 4	6	6732	5.3	347	1954 1955 1956	1 3 2	6010 6027 8035	5.1 5.2 5.1	304 314 404	1 3 2	8110 8080 9855	327 377 403	1 3 2	7499 8113 10339	317 319 478
288158	3 2	2	6460	4.5	291	1954 1957	1	5670 7250	4.3 4.6	246 336	1	80/0	414	1	8284	375
288290	0 14	54	6866	5.2	359	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	4 6 9 10 4 5 4 4 2	7285 7845 7015 6546 7008 6605 7478 6935 7365 7615 8140		365 4∠1 384 341 363 338 408 383 393 402 401	1 2 4 3 4 5 3 2	7020 6535 7203 6700 7290 7393 8073 8525 7870	355 360 379 353 371 366 414 364 289	3 3 2 1	7641 7870 7864 8731	399 413 410 335
						1959	1	7120	5.1	361	1	11490	438	1	11587	451

1952

1 7020 4.8 340

1 9680 477

3 8697 5.1 450

TABLE 15.--UAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

	DAUGHTER	AVEKAGE	8Y 51	RE		R	ECORU AVE	RAGE	BY SIR	L 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.			RECORUS NO.						FAT	YEARLY HE RECORUS NO.		FAT
						1953 1954	SUERN 1 1	9250	5.2 5.4	485 526	1	8100 7540	396 396	1	8687 7859	
289234	. 4	13	7273	5.1	367	1948 1949 1950	1 4 3	7425 7260		321 382 367	1	10020 8580	482 415			
						1951 1952 1953 1954	2 1 1	7420 8200 7290 9800	4.7	371 384 318 432	1	9130 8490 10690	423 403 527	1	9232 9309	441
289244	1	1	9160	4.8	441	1959	1	9160		441	i	9100	438	· i	¥352	4/6
289762	7	20	7723	4.7	373	1952 1953 1954	2 1 2	8610 10420 8560	5.9	456 615 477	2 1 2	9295 9920 9460	464	1	10704	512
						1955 1956	2 2	9300 8500	5.1	5(14 446	2	9310 10455	483	2 1	9778 11652	582
						1957 1958	3 4	7677 8108	5.1	375 418	3 3	9317 1 147	445 444	1 3	12600 9196	651 454
						1959 1960	3 1	7827 7920		367 383	3 1	,7370 7960	334 385	3 1	8139 7467	376 367
289863	1	1	5220	4.8	250	1954	1	5220	4.8	250	1	6940	320	1	6845	375
290511	10	25	7839	5.2	404	1948 1949	1 5	6982	5.2	581 380	1	9790				
						1950 1951	6	8225	5.2	418	2 3	8205 8793	437			
						1952 1953 1954	4 2 1	7798 8865 9070	5.4	393 467 462	2	8570 8115 7580		1	7270	364
290518	99	254	7661	4.7	362	1952	6	1983	4.8	376	5	7972		·		
						1953 1954	33 53	7860 7999	4.7			7901 8430		7 45	8655 8456	
						1955 1956	47 23	7838 8130	4.8	394	23	8743 8629		43 23	8725 8585	
						1957 1958	32 37	8025 7927		380 305		85 77 8245		24 23	8386 8975	427
						1959 1960	19	8065 9693		364 451	1 U	7896 9075	37 I 426	18 4	8499 8938	402 430
290572		1			429	1948	1		4.2							
290649) 1	ц	11298	4.4	499	1954 1957 1958 1959	1 1 1	11230 11890 10420 11650	4.3	518 530 448 499	1 1	8520 7750 8400 8430	409 354 376 374	1 1	6704 7913 8916 9374	376 412
290779	1	2	6710	5.8	390	1951 1952	1		5.4 6.2	372 408						
291223	5	11	7 332	5.1	378	1949 1951 1952 1953 1954 1955	1 1 1 2 3	10670 7900 9420 6250 7850 7723	4.9 4.8 4.7 4.9 5.1	559 389 451 295 383 395 356	1 2		380 382	1	8938 11096	
						1959	i	6670		347	i	8690		i	8175	
293593	3 2	2	6025	4.8	288	1952 1959	1	6330 5720	4.9	312 263						
294006	97	240	7712	4.8	370	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 16 31 43 51 35 20 17 10 9 6	10340 8261 8184 7927 8166 7863 8571 8066 8140 7976 7290 8090	4.6 4.9 4.7 4.6 4.7 4.7 4.6 4.5	524 395 390 387 380 372 402 381 379 366 330 310	5 16 25	9218 9606 9407 8982 9001 8586 9410 9340 8676 7660 8920	411 424 411 383 407 404 433 441 404 370 430	12 29 14 16 10 8 6	8259 8871 8693 9780 9251 9208 8896 9167	
294214	2	6	8967	4.8	429	1950 1951 1952 1953 1956 1957	1 1 1 1	7570 9850 8060 9910 8280 6360	4.8 4.4 4.9	302 474 355 489 356 300	1 1 1	6440 7400 9130 9320	309 353 378 390			
29425	1 1	2	8315	4.6	379	1951 1952	1	8330 8330		379 378						
29430.	3 23	48	7382	4.7	345	1947 1948 1949 1950 1951 1952 1953	1 11 8 0 1	4950 8354 8157 6986 6497 7263 7405	4.6 4.7 4.7 4.7	232 386 373 325 307 336 344	1 1 1 2 2	9640 9650 9460 9075 9040	418 403 402 385 341			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

305-0AY CONTLMP. AV. YEARLY H SIRE OAUGHTERS RECOROS MILK TEST FAT FRESH RECOROS MILK TEST FAT RECOROS MILK FAT RECOROS NO. NO. LB. PCT. LB. YEAR NO. LB. PCT. LB. NO. LB. LB. NO.		
GUERNSEY 1954 2 7510 4.6 346 2 9210 360 2	0070	7.4
1955 3 7567 4.7 360 3 8853 370 3	8878 9418	356 381
1956 2 7860 5.2 408 2 8600 400 2 1957 1 8080 4.4 356 1 9370 382 1	9243 9156	403 401
294873 14 31 7326 4.9 356 1947 1 6450 5.0 325 1 9910 496		
1948 8 7225 4.9 356 1 9260 434 1949 8 8014 5.0 394 1 10410 490		
1950 4 8330 5.0 415 1 9110 424 1951 5 7650 5.0 380 1 8180 388		
1952 1 6000 4.7 285	7150	20.0
1953 2 7295 4.6 334 1 7930 368 1 1954 2 8075 4.8 384 2 8485 402 2	7150 8949	329 424
295238 14 34 7251 4.9 35/ 1947 1 9000 4.6 411		
1948 6 7658 5.2 396 1 7380 364 1949 5 6832 5.1 350		
1950 6 6905 5.1 356 2 8615 396 1951 5 7352 4.9 356 3 9123 374		
1952 3 8357 4.8 397 2 8650 367 1953 2 7685 4.5 345 2 8625 380 1	8328	404
1954 1 9630 4.7 453 1 9150 457 1 1955 1 8950 4.7 416 1 8720 447 1	8742 9559	447 477
1956 1 8580 4.8 412 1 8970 456 1	8884	462
1957 3 7770 4.6 361 3 7963 377 3	7205	324
295265 2 7 7405 5.1 374 1947 2 8045 5.2 410 1948 2 6805 5.1 346		
1949 1 7430 4.7 349 1950 1 7850 4.6 359		
1951 1 8080 4.7 379		
295390 293 777 8329 4.6 384 1947 2 8570 4.3 370 1948 18 7678 4.7 353 2 8275 403		
1949 35 8095 4.7 377 5 8448 391 1950 42 8484 4.7 401 14 9325 423		
1951 48 8245 4.8 394 21 9552 427		
1952 81 8309 4.7 386 48 8536 395 1953 92 8496 4.6 388 80 8263 383 20	8541	412
1954 115 8654 4.7 404 110 8407 399 92 1955 113 8855 4.7 415 108 8863 412 102	834 I 8666	391 404
1956 73 8654 4.6 394 69 8578 403 62 1957 61 8798 4.5 398 58 8928 427 50	8862 8870	419 426
1958 57 8762 45 391 42 8452 402 42 1959 32 8237 4.3 361 31 7879 363 31	8784 8916	4 1 4 4 1 4
1960 8 8864 4.4 390 8 8018 388 8	8422	408
295672 3 8 8730 4.5 389 1949 3 8750 4.4 388 1950 2 7460 4.7 344		
1951 1 11010 4.6 503 1 9400 405		
1952 1 10980 4.3 470 1 9860 407 1953 1 10340 4.3 447 1 10140 405		
295802 1 3 7923 5.1 399 1948 1 7670 5.3 404		
1949 1 8510 4.8 404 1950 1 7590 5.1 389		
296098 3 4 7732 4.9 380 1948 2 7245 5.1 365		
1950 1 7220 4.8 347 1954 1 8040 4.9 393 1 11850 427 1	10758	409
296102 29 72 6950 5.1 353 1950 13 7431 5.3 392 4 7918 411		
1951 18 6973 5.1 350 6 8100 401 1952 13 6978 5.3 366 8 7773 375		
$195\overline{3}$ 12 6797 5.3 358 11 7558 362 1 1954 4 8448 5.2 431 4 8175 401 4	8611 8445	419
1955 6 6948 5.1 353 6 6942 347 6	7730	391 364
1957 2 6865 4.8 528 2 5905 291 2	6633	319
1958 1 7050 4.0 280 1 5450 259 1 1959 1 7440 4.2 309 1 6780 347 1		373
299996 64 190 7837 4.8 376 1948 12 8108 4.9 399 3 7333 357		
1949 39 7991 4.8 382 6 8792 426 1950 33 7703 4.9 377 7 9371 455		
1951 29 8463 4.7 401 14 8034 389 1952 22 8186 4.7 386 14 7819 376		
1953 16 8683 4.7 409 15 7534 360 8 1954 17 9032 4.7 422 16 8305 392 15	7987 8346	385 394
1955 9 8809 4.9 434 6 8705 420 8 1956 5 8636 5.0 434 4 7765 386 4	8517	
1957 5 9746 5.0 484 4 8828 425 4 1958 2 9555 5.0 468 1 8750 466 1	7486	364
1959 1 11300 4.9 549 1 7790 370 1		410
301627 2 4 6959 5.3 369 1954 1 8430 5.2 439 1 8220 382 1		383
1955 2 6955 5.4 373 2 6375 281 1 1957 1 10870 5.3 578 1 9440 429	9081	424
302440 1 1 4570 5.3 241 1955 1 4570 5.3 241 1 8050 378 1	8022	358
302965 52 112 6816 4.8 327 1951 5 6758 5.0 335 1 6210 296		

PLNNSYL VANIA 324

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BROLOING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER	AVERAGE	84	SIRE	

STRE U	AUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.	MILK L8.		FAT LO.	JOS-DAY (RECUROS NO.	ONTEMP MILK L8.	FAT	YEARLY HE RECOROS NO.	MILK	
						1952 1953 1954 1955 1956 1957 1958 1959	GUERN 36 25 14 13 8 3 4 3	7110 7033 7511 7732 7396 7137 6786 7397 3670	4.8 4.9 5.0 4.8 5.0 5.0 5.1 4.6 5.8	341 343 375 378 376 360 347 340 213	17 20 14 13 8 3 4 3	8144 8284 8716 8928 9285 8503 8378 7307 2950	381 379 407 413 410 402 382 338 146	8 14 12 7 2 3 3	8525 8585 8732 8800 8290 8091 7914 7488	3B8 399 412 411 408 371 378 375
303068	8	17	7448	4.7	343	1948 1949 1950 1951 1952 1953 1955 1956	2 2 2 5 1 1 2 1	6850 8240 7460 7686 7500 8270 8585 7080 4700	4.6 4.9 4.6 4.7 4.4 4.3 5.3	315 393 362 354 356 363 370 303 248	1 2 1 1	10150 8740 7350 7960	472 422 361 389	2	8219 7041	406 361
303185	1	2	7885	5.3	417	1951 1952	1	8270 75 00	5.3 5.3	438 396						
303820	ц	10	8515	4.8	40d	1947 1948 1949 1950 1952 1953	1 1 2 1 1 1	9700 7770 10260 8090 7320 6990 7670	4.9 4.8 4.4 4.7 4.9 4.9	480 370 455 375 359 339 380	1 1	9570 9100 8770	465 439 421	ı	8469	399
						1955 1957	1	9850 11560	4.3	425 493	1	8250 8510	381 405	1	8360 9167	405 420
303912	213	463	6915	5.0	347	1951 1952 1953 1954 1955 1956 1957 1958 1959	12 49 101 98 75 34 36 30 18	7071 7214 6856 7068 7346 7156 7698 7691 7596 7648	5.1 5.0 5.1 5.1 5.0 5.0 4.9 4.9	359 310 346 359 372 359 383 379 374 346	3 37 87 97 74 34 34 32	8713 8678 8278 8473 8556 8272 8397 8918 8038 8770	363 409 388 391 396 380 389 401 364 407	29 88 71 31 35 31 16 3	8603 8321 8608 8577 7810 8912 8933 8215	399 387 404 415 371 495 409 402
303913	24	58	6902	4.9	338	1952 1953 1954 1955 1956 1957 1958 1959	8 20 12 6 4 4 3	6093 6897 7233 7538 8960 7443 8840 3960	4.9 4.9 5.0 4.8 5.0	296 340 353 374 428 364 429 182	5 18 11 6 4 4 3	7/52 7902 8223 8967 8508 7213 7400 6490	372 378 379 412 417 353 358 289	10 9 6 4 4 3	8784 8368 8789 8916 7488 7299 7521	399 379 408 425 372 356 343
304487	1	2	6400	4.6	293	1955 1956	1	5930 6870	4.7	277 309	1	7590	383	1	7913	379
3064 75	40	160	8316	4.9	407	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 9 15 19 10 19 17 17 15 8 8 7 5	8071 8603 8151 8039 8438 8245 8168 9007 8794 9554 9671 10341 8998 10825	4.7 5.0 5.0 4.9 5.1 4.8 5.1 5.0 4.8 5.0 4.9	376 426 406 395 431 401 392 460 444 465 475 502 423 493	2 4 8 4 12 15 14 7 7 6 5	9065 9753 9433 9155 8853 8717 9423 9559 9197 10180 10242 9702 10725	439 485 456 459 430 422 472 465 452 505 501 472 515	1 9 6 2 2 4 5	10192 9050 9785 8241 9690 10257 10471 10971	524 446 496 420 483 510 507 533
306512	101	251	7715	5.0	385	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 5 10 14 21 40 38 38 22 19 21 15 5	8390 8235 8532 8317 8549 7713 7590 7656 7947 8070 8266 8023 8005 8824	4.7 4.5 5.2 5.3 5.1 5.0 5.1 5.0 5.1 5.0 5.1 4.9 4.8	398 368 443 445 440 396 381 386 397 408 413 405 387 429	1 1 3 4 11 36 38 36 22 19 17 14 5	7190 12630 8450 10018 8230 8490 8530 8908 9345 9702 9326 8763 9098	347 608 423 474 387 397 388 396 421 406 399 372 385	15 31 33 19 19 16 14	9225 8788 8978 9188 9274 9613 9593 9557	436 403 408 427 425 415 410 404
308024	Ц	10	7092	5.3	371	1949 1950 1951 1952 1954 1955	2 1 3 1 1	7475 7230 7047 5210 8010 7490 4990	5.0 5.1 5.2 4.9 5.4 5.3	372 370 366 256 432 396 254	}	6470 7010 7450	361 369 369	1 1	6780 6987 6616	348 362 341
308231	1	5	8962	5.2	458	1953	i	9820	5.1	500	1	8850	467	,	23,0	5,,

TABLE 15.--BAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BRELOING URGANIZATIONS--GROUPLO BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	8Y YEAR OAUGHTER				ROS FR		STATE ONE	. Y			FRESHENING	YEAR				
	AUGHTERS			TEST	FAT		RECORUS		TEST			CONTLMP		YLARLY HE		
NO.	NO.	NO.		PCT.	L8.	YEAR	NO.	L8.	PCT.	L8.	NO.	LG.	LB.	NO.	L8.	LF.
						1955 1956 1957 1959	GUERA I I I I	11180 7950 4950 10910	4.7 5.3 5.8 5.1	527 419 285 558	1 1 1 1	9420 8700 10330 9470	507 484 568 480	1 1 1	9352 8851 9221	491 477 482
308658	66	172	7764	4.8	36 8	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	2 28 30 28 31 19 16 7 3 2	7280 8062 8022 7555 7876 7761 8682 8587 8960 7950 7600	4.6 4.9 4.8 4.7 4.7 4.7 4.7	334 391 392 360 370 358 408 405 416 343 357	1 6 13 15 17 18 18 18 2 2	8430 9043 8658 8414 8908 8264 8760 9023 8340 7290 8845	379 419 423 397 392 390 404 418 377 348 423	2 17 8 3 2 2	8622 8442 9112 8618 8524 8726	399 396 426 392 413 417
309603	1	5	7868	4.8	378	1951 1957 1953 1954 1955	1 1 1	9880 5910 8820 6730 8000	4.9 4.5 5.0 4.8 4.8	480 265 439 325 382	1 1 1 1	8190 1410 8380 1640 8330	340 328 400 362 414	1	7150 7826	
309643	ц	19	7350	4.7	344	1947 1948 1949 1950 1951 1952 1953 1954 1955	4 2 1 3 1 2 2 2	6933 7710 8180 7460 8483 7620 8505 5695 6940 7490	5.1 4.7 4.1 5.1 4.5 5.3 4.6 4.6 4.7	347 358 333 381 379 405 394 260 325 386	1 1 1 1 1	8780 7800 7950 7700 8880 7850 7740	413 356 380 350 414 365 360	1	7674 8273 7815	353 385 364
310263	22	75	7433	4.9	357	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 14 12 8 8 9 8 7 4 2	7160 6701 8170 8144 7715 7843 8889 8953 8658 8950 9730	4.9 5.0 5.0 4.7 4.8 4.7 4.5 4.5 4.3	350 335 407 383 371 369 400 407 384 387 422 464	4 3 5 7 8 7 4 2 1	9250 9057 10032 8616 8526 8509 8204 8293 7815 8510 7760	432 441 463 415 408 397 389 375 359 392 355	2 7 4 2 1	7598 8345 8491 8094 8709 8622	367 587 389 386 414 402
311576	55	142	7339	4.9	356	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 10 25 26 26 19 18 13 9 5 4 4 3	5670 7188 8013 7256 7442 7178 7113 6678 6680 8405 7327 9803 5923	5.5 5.0 5.0 5.0 5.0 4.8 4.6 4.7 4.8 4.6	315 359 397 359 359 342 332 321 313 395 350 450 254	4, 9, 9, 1,1 8,5 4,5 4,5	10740 9170 8481 8411 8570 8594 8264 9588 8687 9360	482 415 396 361 360 357 338 399 375 396 391	2 8 5 4 3 3	9004 7975 8371 9003 8436 12466	426 343 344 416 373 485 403
312960	3	19	9479	5.2	486	1950 1951 1952 1953 1954 1955 1956	3 3 3 1 2 1	9933 7713 9500 9960 9830 11200 11060 10470	5.2 5.4 5.2 5.1 4.9 5.1	513 418 490 508 484 563 543 533	2 2 2 2 1	9110 7805 8890 7030 7490		1 2	8295 8437	444
312970	1	2	6120	5.3	328	1956 1957	1	7070 5170	5.6	396 260	1	9320 9470	382 390	1	12786 10420	456 376
312989	55	108	7320	4.6	338	1952 1953 1954 1955 1956 1957 1958 1959 1960	20 20 20 15 10 10 8	6968 7149 7814 7925 7787 7896 6830 7589 9730	4.9 4.5 4.6 4.7 4.7 4.6 4.7	338 323 361 372 363 364 322 337 442	1 16 19 20 15 10 8 8	8300 9389 8959 8584 8301 9117 8604 8279 9470	381 401 390 393 381 419 391 378 472	3 16 16 13 8 8 7	9854 9335 8263 8453 8908 8721 9119 9407	409 397 377 396 390 397 425
313014	272	610	7052	5.0	350	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 29 85 89 125 100 64 46 39 22	9275 6787 6878 6859 7345 7523 7168 7493 7935 7299 7479	5.0 5.0 5.0 5.0 5.0 4.9 4.9 4.9	456 344 344 343 363 374 351 365 386 357 360	11 47 86 124 98 62 45 29 21	8213 8104 8083 8510 8347 8399 8487 8798	386 384 379 397 398 392 397 403 383 364	31 111 92 60 41 26 21	8281 8229 8308 8359 8491 8917 9091 8802	390 388 394 406 408 411 419

PENNSYLVANIA

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SCRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREEF,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE RECURD AVERAGE BY SIRE BY FRESHENING YEAR

SIRE (OAUGHTER. NO.	RECORDS	MILK L8.		FAT L8.	FRESH YEAR	ĸ∂CORDS NU.	MILK L8.			SOS-DAY (RECUROS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							GOLRI	NSEY								
314367	3	12	8276	4.6	388	1949 1950 1951 1952 1953 1954	1 2 3 1 2 1 2	7700 7965 7613 10480 9885 4890 8590	4-1	386 374 354 514 455 191 368	1 2 1 2 1 2	6640 7955 8670 8585 5970 7995	351 359 404 413 283 367	1 2	6344 8001	303 303
315580	39	105	7915	4.6	363	1952 1953 1954 1955 1956 1957 1958	0 23 20 18 11 10 10	7527 7809 8086 8872 8887 8552 3014 9179	4.0 4.7 4.8 4.7 4.4 4.4 4.5	349 363 365 413 372 378 363 421	22 19 15 10 9 1	8575 8819 8803 9223 8785 9532 8879 8004	405 426	12 17 16 10 7 7	8449 9447 8698 9838 9514 9237 9131	376 426 401 450 444 421 428
315797	L,	6	7400	4.9	361	1949 1950 1951 1952 1953 1955	1 1 1 1 1	7230 6170 5200 9100 8380 8960	4.8 4.8	368 314 257 433 401 426	;	8160 8070	416 390		9687 62 6 2	
316538	12	46	8053	4.3	348	1947 1948 1949 1950 1951 1952 1953 1954	1 5 10 9 7 5 6 2	6700 7184 8759 8697 7244 8410 8462 8996	4.4 4.2 4.2 4.2	282 318 378 352 319 357 354 385 489	2 3 4 4 5 4 2	10040 11467 11013 10593 10427 10295 10625 10990	407 391 340 385 384 393	2 1	10355 10159	364 374
318429	8	13 *	6497	5.2	339	1953 1954 1955 1956	2 3 4	7500 7570 6905 5745	5.4 5.6 5.5 4.7	403 423 367 273	2 2 2 1	9505 10425 10460 9670	424 450 465 381	1 2 1	12208 10589 11020	486 474 479
319075	1	3	7610	4.5	314	1948 1949 1950	1 1 1	6380 6560 8090	4.5 4.3 4.4	290 294 357						
319572	2	ţ	6373	5.5	343	1954 1955 1956 1957	 	7090 6770 6680 4950	5.3 5.4 5.3 5.6	376 366 352 277	1	11940 12620 11390 9270	475 473 501 376	1 1 1	11140 11946 7292 11827	479 394
319842	16	54	7760	4.7	36∠	1950 1951 1952 1953 1954 1955 1956 1957	6 11 9 9 8 5 3 2	8968 7330 8376 8472 8014 7902 8517 7935 9540	4.7 4.5 4.6 4.0	408 349 393 377 373 369 387 377 500	3 6 8 8 6 5 3 2	12847 9248 8453 9329 8601 7712 6537 7885 8440	394 399 371 361	4 8 4 3 2 1	9497 8922 8529 7786 7069 7129	393 383 389 349
320873	1	6	7693	4.7	363	1949 1950 1952 1954 1955	 	8390 7340 7426 6940 7886 8190	5.0 4.9 4.5 4.4	411 366 364 314 349 372	 	7490 8890 8840 8890	364 394 385 404	1	9123 0633	
322342	1	1	11830	3.9	458	1958	1	11830	3.9	458	1	12180	479			
322436	10	26	7948	4.8	375	1950 1951 1952 1953 1954 1955 1957 1958 1959 1960	6 3 1 2 1 1 2 1	8450 6446 7685 6703 9890 6850 6730 7350 8840 7380	4.7 5.0 4.8 4.5 5.0 4.6 5.3 4.5	403 306 384 316 444 343 311 389 397 334	2 3 3 1 2 1 1 2	10260 8247 8673 9040 10750 7585 8070 7410 8100 9580	354 344	1 1 1 1 2	7347 9178 9527 10213 9587 9625	
323584	2	3	8353	4.8	400	1957 1958	2	8485 6010		404 270	!	7310 8260	349 388	1	7641 7249	363 338
323661	3	7	7563	4.8	364	1954 1955 1956 1957 1958	1 1 1 2 1	6800 8000 6940 6210 9640	4.8 4.6 5.1	326 380 334 286 487	1 1 1 1	9740 11410 10580 9320 10630 10470	371 424 417 390 468	1	7161 8796 12034	349 512
324192	1	6	7828	5.0	392	1959 1949 1950 1951 1952 1954	1 1 1	7060 7420 3660 8890 7540	5.0 5.1 5.2	310 352 380 449 443 364	1	90 10 9140 8850 8300 8460	403		7750	

TABLE 15.--CAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY CREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRC RECORD AVERAGE BY SIRE BY FRESHLINING YEAR

	DAGGITTER	AVENAGE	01 311				ECOKU AVE	KAGE ()1 21K	E 87	FRESHLNING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	KECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	305-0AY (RLCURUS NO.			YEARLY HI RLCORUS NO.	MILK	RAGE FAI LF.
						1955	GUERN 1	7400	4.9	361	1	8400	409	1	8142	396
32 425°	7 33	128	8405	4.8	403	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 11 14 15 19 14 18 14 7 5 2 2	7139 7669 7613 8823 9132 8969 9581 8799 10170 9354 7975 8920	4.9 4.9 4.8 4.8 4.8 4.6 4.7 4.6	347 369 371 423 437 426 462 414 404 427 374 410	2 6 7 11 15 12 17 14 7 5 2 2	8345 9128 8160 8581 9245 8783 9301 8801 8351 8678 7700 7970		2 13 10 6 4 2 2	9232 8521 8587 8633 8039 8083 8944	398 404 422 373 394
32619	¥ 55	152	7972	4.7	375	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 26 23 23 25 18 11 8 5 2	7873 7790 7576 8245 8313 8593 8797 10015 10016 8670 6555	5.1 4.8 4.8 4.7 4.5 4.5 4.7 4.5	404 375 361 399 393 387 397 452 465 376 293	2 13 16 19 23 18 11 8 5 2	9795 8902 8943 9200 9050 9560 9637 9708 10608 9405	409 400 396	6 17 10 8 5 2 2	8760 9404 8532 9930 10479 10104 10666	399 398 359 445 476 438 456
32701	1 3	6	6286	5.2	328	1953 1955 1958 1959 1960	. 1	6640 6090 7240 7020 6010	5.7 5.2 4.9 4.5	382 315 352 319 273	2 1 1 1	10635 8040 8830 7310 7100	438 376 433 347 346	1 1 1	8044 8251 7990 7859	384 407 387 382
328154	4 225	587	6970	5.0	350	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	7 48 81 80 112 82 76 43 22 15	6633 7338 6930 7011 7251 7074 7465 7340 7950 8133 7876 8504		335 378 323 351 363 357 374 364 396 408 380 405	9 24 39 75 76 73 40 10 14 12 5	8878 8667 8238 8434 7962 8537 8397 8472 8214 8932 8320		27 67 37 18 14 12 5	8445 8272 8569 8876 8092 8545 9054	390 377 391 425 384 461 420
328514	4 4	5	7188	4.6	338	1950 1951 1956 1959	1 1 1 2	6010 8410 8420 5910	4.1 5.5 4.3 4.6	249 467 365 271	;	85 7 0 7 320	377 333	1	9603 7303	
328527	7 11	31	6946	5.1	349	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 3 7 5 3 3 4 3	7190 8110 8610 6214 6736 5780 8377 7108 6143	5.0 5.3 5.0 5.5 5.4 4.4 4.5	356 425 427 336 369 307 367 321 315	2 2 7 5 3 2 3 3	13500 10335 7873 8002 6570 7940 8247 7520	549 423 339 369 292 349 364 348	7 5 3 2 3	7033 7652 9174 8132 9443 7496	354 402 342 406
32909	3	4	7332	4.7	340	1947 1948	1 3	6450 7397	5.1 4.7	329 342						
329249	27	80	8042	4.7	377	1948 1949 1950 1951 1952 1953 1954 1955 1956	9 17 9 11 11 9 4 3	8289 8339 8784 9285 8370 8844 9170 9163 7635 9400	4.9	376 395 399 455 392 429 457 417 366	7 2 7 8 9 4 3	9167 8225 9301 8544 8272 8918 9053 8815 9320	393 426	4, 3 3 4, 1	7731 9447 9156 8339 8066	371 435 412 461 396
33009	3 1	1	6430	4.9	312	1957	1	6430	4.9	312						
330448	3 1	1	7220	5.4	391	1952	1	7220	5.4	391						
330720	. 11	26	7621	5.2	396	1952 1953 1954 1955 1956 1957 1958 1959	2 5 0 3 1 2 2 4	8490 6602 8930 8690 13700 10515 3645 10083	5.4 5.2 5.2 5.2 5.5 4.9	439 339 462 452 711 566 423 489	1 4 3 1 2 2	9160 9035 9085 8723 10420 9330 9705 8318	469 447 438 428 530 459 429 401	4 2 1 2 1 4	9867 9919 9636 10453 9636 8761	493 485 453 481
331112	2 15	34	5956	5.2	313	1950 1951 1952 1953	5 9 8 3	5656 5560 6321 6020		299 295 342 313	1 3 3	8770 8337 7463	388 381 340	2	8 30 0	368

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

328

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	8Y 511	₹Ł		R	ECORD AVE	KAGE 8	SY SIR	E BY	FRESHENING	YEAR				
SIKE NO.	DAUGHTERS NO.	RECORDS NO.			FAT L8.	FRESH YLAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY (RECORDS NO.			YLARLY H RECORDS NO.		
						1954 1955 1956 1957 1958	GULRN 2 2 1 1 1	6915 7425 7080 8130 7130	5.4 5.3 5.9 5.2 5.0	371 390 416 422 354	}	71o0 7590	356 379	1	7205 7739	361 396
331204	7	15	8163	4.8	396	1954 1955 1956 1957 1958 1959	1 1 4 4 2 2 1	7470 7530 8153 8168 7285 9435 4860	5.5 5.7 5.3 4.9 5.0 4.7 4.1	407 426 423 403 363 446 197	1 1 3 3 1 2	11890 12180 10387 9517 8650 6155 5680	486 513 512 424 422 286 228	1 2 2 2	11739 10911 9783 7734	473 507 437 373
331750	36	93	7577	4.6	349	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	10 17 20 12 12 6 6 3 3 2	8297 7814 7906 8099 8345 8755 8785 8785 8287 10550 7640 7710	4.4 4.6 4.5 4.5 4.6 4.7 4.6 4.2 4.4 4.2	366 368 368 363 375 400 408 401 354 465 321 314	4 8 12 6 6 3 3 2 1	8088 8575 8689 8636 8620 8252 9643 8253 8877 9115 9760	407 408 407 403 440 412 407 424 409	6 6 2 2 2 2 1	8413 9174 8475 9091 10355 10399 10769	403 420 423 429 476 436 436
33192 i	88	206	7229	5.0	357	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 19 32 34 40 25 18 10 5	7677 7177 7202 7479 7114 7640 7907 8103 7712 7842 7957	5.1 4.9 5.0 5.1 5.0 5.1 4.9 4.9 5.0 5.2	390 357 360 377 355 388 390 395 382 407 395	3 6 18 24 36 25 18 10 5 6	9760 8583 7995 8096 8251 8323 8499 9170 7944 8660 8383	469 396 376 390 385 395 413 414 358 406 381	11 20 16 9 5 5 6	8643 8030 8642 8880 8038 8763	414 394 424 419 373 410
332293	3 237	633	7908	4.8	38 1	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 32 55 72 94 104 88 53 54 39 24	9212 8081 8320 7716 8015 8003 8306 7769 7834 7734 7828 8054	4.8 4.9 5.0 4.8 4.8 4.8 4.7 4.8 4.8	440 397 410 379 386 382 400 376 372 368 370 377	4 15 31 46 85 100 81 50 53 33 24	7893 9031 9377 9097 8876 8886 8967 8613 9042 8472 8344 7660	383 415 425 394 388 395 413 399 411 392 382 361	33 91 78 50 45 32 24	7970 8773 8546 8930 8843 8825 8761 8733	374 392 391 420 405 408 405 416
332372	93	237	8096	4.6	373	1952 1953 1954 1955 1956 1957 1958 1959 1960	8 33 48 44 28 24 30 18	8960 8862 8452 7929 8064 7977 8113 7813	4.7 4.5 4.7 4.6 4.7 4.6 4.7	417 403 395 371 367 377 373 365 385	6 32 47 42 28 24 21 18	9065 8600 8449 8460 8497 8579 8227 8631 7298	431 385 387 383 392 401 382 392 332	8 44 38 25 12 17 17	7975 8205 8798 8302 8102 8892 9175 7949	368 379 402 391 383 417 421 373
333176	31	63	6889	4.8	330	1949 1950 1951 1952 1953 1954 1955 1957	10 17 14 9 7 3 1	7745 6597 7545 7634 7299 8450 4700 6550 9350	4.9 4.7 4.8 4.8 4.5 4.7 5.3	378 306 359 364 347 377 218 350 430	2 2 5 6 7 3 1	10105 9200 10278 9157 8489 9003 8070 9460 8300	412 364 425 391 366 364 404 451 406	3 3 1 1	9265 8756 7957 8066 8306	
333442	! 1	2	6355	5.4	345	1950 1951	1 1	5560 7150	5.4 5.4	300 389						
33428	2 3	4	7310	4.9	360	1954 1955 1 9 56	2 1 1	7390 6650 7840	5.0 4.8 4.7	372 318 366	2 1 1	8575 8130 11260	352 387 440	1	8535 8720	403 328
334310	69	194	7774	4.6	354	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	8 28 40 31 27 22 11 14 9 2	7483 8039 8102 8070 8246 8055 8123 7255 7679 8420 9365	4.5 4.6 4.7 4.6 4.6 4.4 4.5 4.1	332 368 377 365 377 350 355 324 334 378 381	4 13 30 30 27 22 11 13 7 2	9170 8779 8518 7932 8346 8720 8159 8544 8296 9210	410 411 400 371 389 398 372 379 381 400 460	7 24 20 10 12 7 2	8987 8558 9196 8603 7617 8366 10230	
335215	2	3	7768	5.1	394	1954 1955 1959	1 1 1	84/0 8340 7130	4.9 5.0 5.2	414 413 373	1 1 1	7910 7450 5130	370 361 234			
335596	5 15	39	6756	4.9	332	1949	3	6793	5.1	341						

TABLE 15. -- DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL ORGANIZATIONS -- CHOUNT

	DAUGHTER	AVERAGE	8Y S16	RE		R	ECORD AVL	RAGE	BY SIR	E BY I	RESHENING	Y∟AR				
\$1 KE' NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RLCORUS NO.		TEST PCI.	FAT LB.	305-DAY C RECURDS NO.			YEARLY HE RECORDS NO.	MILK	
						1950 1951 1952 1953 1954 1955 1957 1958 1959	GULRN 8 5 5 1 2 1 3	6958 6480 7786 7240 7870 7360 6570 6230 7517	4.9 5.0 4.8 5.0 5.2 5.1 5.2 5.3 4.7	341 319 374 357 402 374 340 333 346	5 4 5 3 1 2 1 3	8810 8182 8388 7942 9217 7260 8225 6330 8370	431 385 383 369 425 371 370 303 362	2 3 1 1 1 3	8987 8433 6976 7543 7586 8644	409 399 301 307 358 384
335746	5 224	497	7928	5.0	395	1953 1954 1955 1956 1957 1958 1959	3 65 90 72 82 99 63 23	4737 7970 7880 7963 8126 8034 8457 8547	5.2 5.0 5.1 5.1 5.0 4.9 4.9	241 398 400 401 407 397 412 418	2 62 89 68 81 76 62 23	8580 8569 8735 8684 8846 8928 8777 8776	354 398 402 376 404 399 387 387	1 58 82 67 56 64 59	9766 8374 8978 8602 8684 9453 9094 9166	399 386 413 410 410 426 410
336053	3 1	1	7960	5.1	405	1958	1	7960	5.1	405	1	9580	423			
336535	5 3	14	7257	4.6	327	1951 1952 1953 1954 1955 1956 1957	2 1 2 1 4 1 1 2	7290 4570 7190 6690 7983 6770 10410 8600	4.7 4.3 4.5 4.8 4.5 4.8 4.4	335 197 322 318 352 323 454 378	1 1 3 1 2	8370 8230 8670 8590 8890	41c 385 406 398 411	2 1 2	9123 9134 9031	408 420 418
336536	3 56	122	7832	4.6	359	1954 1955 1956 1957 1958 1959 1960	7 11 22 26 28 23	8137 7571 7693 7681 7946 8548 5242	4.6 4.6 4.7 4.5 4.6 4.7	391 360 354 358 358 390 241	7 11 20 20 26 23 4	9264 9067 9122 8910 8690 9161 8358	407 397 337 386 370 381 345	7 10 20 26 26 23	8455 9249 8765 8537 9590 9587 9780	379 401 400 374 409 400 419
336810) 15	46	8351	4.6	377	1950 1951 1952 1953 1954 1955 1956 1957	4 10 10 6 6 4 2 3	7888 8409 7722 8568 9100 8980 8945 7033 12550	5.1 4.4 4.6 4.7 4.9 4.6 5.0 4.7	402 367 351 399 443 398 444 317	2 6 7 6 6 6 14 2 3	6765 8080 8351 7620 9568 9398 9200 8157	348 392 415 368 436 455 445 405 442	1 5 3 2 3	8284 8714 9181 9064 8905	423 450 451 456 437 461
337136	5 3	15	8801	14 . 14	386	1940 1950 1951 1952 1953 1954 1955 1956 1957	2 2 1 1 2 1 2 2 2	8670 9455 8900 6840 9710 9636 8400 8435 9295 7630	4.6 4.7 4.5 4.4 4.5 4.5 4.1	398 443 402 304 418 436 374 345 399 314	1 1 1 2 2 2	7150 7110 7270 7450 6430	331 370 350 376 368 314	1 2 1 1	7674 6922 6856 3153	393 335 331 401
339466	2	2	7705	4.9	377	1956 1958	1	7470 7940	4.5 5.2	33d 416	1	7470 8580	333 421	1	7085 8349	352 403
340985	i 1	5	6544	5.1	331	1954 1955 1956 1957 1958	1 1 1 1	7970 6150 6040 6230 6330	5.2 5.4	413 332 309 313 316	1 1 1 1	8190 9010 8980 9250 7730	365 434	1	1020/ 9047	448 403
341070) 76	159	7254	4.8	348	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 9 14 24 35 26 11 13 13 6	6358 7693 8301 7096 7455 7431 8585 7954 6994 8810 10420	4.9 4.9 5.0 4.9 5.0 4.9 5.0 4.9 4.5	318 373 410 354 361 359 425 386 331 406 484	1 10 23 34 24 11 13 11 6	8590 8000 8405 8263 8383 8931 8214 8462 9467 8305	450 390 402 387 388 415 387 407 374 405	6 32 21 9 13 10 6	8297 8513 8349 8357 8198 9444 9418	375 390 521 372 493 416
341581	52	182	8058	4.7	374	1947 1948 1949 1950 1951 1952 1953 1954 1955	5 25 26 30 29 19 17 12 8	8564 7691 0318 8503 8486 8709 8112 8616 6023 8873	4.0	412 555 386 393 391 411 380 421 385 397	1 5 13 13 13 14 11 8 3	8510 9900 7886 9063 9385 9211 0729 9264 9158 8577	400 440 382 421 411 425 399 424 411 387	6 9 8 4	859 919 9295 921	44 ?

PENNSYL VANIA 330

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE D	AUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	NO.	LB.	TEST PCT.	FAT L8.	305-0AY C RECURDS NO.	ONTEMP MILK Lb.		YEARLY HE RECOROS NO.	MILK	
						1957 1958	GUÉR 3 4	8697 9113	4.4	383 393	خ با	7887 8260	37 <i>1</i> 375	3 2	8887 8372	425 393
342/86	99	331	8388	4+5	379	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	13 39 54 59 46 35 18 12 9 6 5	7683 8052 8653 8754 9738 8666 9572 10296 9084 10090 9068 11694 9710	4.6 4.5 4.5 4.5 4.5 4.3 4.4 4.3	349 364 389 398 395 393 429 456 432 458 414 516	3 14 18 27 33 32 32 17 11 8 5	9767 9285 8901 9451 8993 8477 9396 9692 9014 9423 8840 9258 8490	464 428 427 426 406 587 422 428 414 431 436 463 410	16 30 14 10 8 5	8948 9324 8956 9543 9129 9374 9298	406 420 406 435 439 467 472 529
343683	1	1	5260	4.5	238	1953	1	5260	4.5	238	1	8180	404			
344094	93	169	7049	4.8	340	1953 1954 1955 1956 1957 1958 1959 1960	10 38 45 29 14 16 11	6635 7022 7226 6965 7974 7295 7213 7812	4.9 4.9 4.9 4.8 4.9 4.7	326 338 349 341 383 357 339 356	9 38 45 29 14 12 11	7974 8137 8462 8227 8753 8582 8028 7838	379 378 390 383 390 407 372 358	1 36 41 26 10 10	10311 8252 8529 8759 9367 8776 8861 8535	387 381 388 410 421 412 424 402
344451	26	65	7586	4.6	341	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 17 16 12 6 4 2 2	7854 7938 7753 8078 9282 10110 9710 6370 12680	4.4 4.5 4.4 4.3 4.7 5.1	387 349 343 355 407 434 436 255 491	2 12 15 12 6 4 2 2	9145 9058 8808 8869 9783 10130 9635 9035 8780	409 399 382 384 418 451 401 367 392	7 10 5 3 2 2	8620 8924 9204 1D362 9914 9505 9091	362 376 370 474 416 403 407
345310	243	616	7253	4.6	332	. 1951 1952 1953 1954 1955 1956 1957 1958 1959	16 75 128 117 92 47 48 54 32	7068 7036 7233 7588 7578 7409 7254 7174 7153	4.7 4.6 4.7 4.7 4.6 4.6 4.5 4.5	325 323 334 357 353 339 332 321 311 342	6 39 105 113 88 47 46 48 32	8182 7920 8079 8265 8458 8127 8190 7856 7322 8214	390 372 375 387 391 382 380 366 339 360	30 106 80 43 33 42 31	8179 8154 8508 8136 8102 8042 7923 7968	3/3 3/9 3/4 385 376 3/5 3/3 365
345313	1	2	8600	4.4	377	1957	2	8600	4.4	377	2	8320	454			
346052	2	15	8120	4.9	401	1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	1 1 2 2 2 1 2 1 2	7810 7430 8110 7790 8450 8250 7590 8725 8010 7810	5.0 5.4 4.9 5.3 4.9 4.9 4.8	367 374 442 363 446 408 369 415 387 352	1 1 2 2 2 2 1 2 2 1	7870 1760 8830 8520 8710 8610 8290 8900 8320 8840	416 381 425 409 416 421 407 445 394 399	2 2 1 2 2 1	8916 8884 9025 8720 9407 8578	425 457 445 425 408 414
346065	50	88	7106	4.6	321	1953 1954 1955 1956 1957 1958 1959	9 17 18 8 12 12 9	7134 8069 6947 8248 7733 7153 6569 8233	4.0 4.0 4.0	329 368 334 382 358 330 300 350	8 13 18 8 12 11 9	7850 8803 8501 9300 8187 8244 8506 7790	366 415 424 431 396 364 368 365	1 14 16 8 8 9 9	7205 8664 8555 8759 8112 8698 9076 9985	307 406 421 415 400 394 397 466
346892	2	2	5470	4.8	263	1957 1958	1	6070 4870		281 244	i 1	8020 79 20	401 293	1	6834	331
347310	1	1	8 150	4.1	334	1954	1	8150	4.1	354	1	10600	397			
348551	1	2	7120	5.5	390	1958	2	/120	5.5	390	1	7780	359	1	7292	344
34898 9	58	136	73 32	4.8	356	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 16 25 25 22 11 7 8	7631 7030 7312 7376 7582 8128 8627 7571 7745	5.1 4.7 4.9 4.9 5.1 4.9 4.9	378 355 346 358 371 417 423 577 367 363	3 5 13 22 21 11 7 8 6 5	7773 10128 8391 9100 9196 9032 8706 9498 9273 7284	386 457 382 408 399 412 400 430 399 332	6 18 9 5 5 5 5	8377 8775 9040 9596 8781 8476 8443	401 391 402 464 421 388 393
350703	99	209	7098	4.9	347	1949 1950 1951 1952 1953 1954 1955 1956	4 25 27 37 47 25 16 8	7693 7571 7106 7069 6987 7509 7984 7439 8238	4.8 4.9 4.9 5.0 5.0	390 369 344 349 343 400 392 334 381	5 9 22 44 25 16 8 0	7892 7569 8112 7821 8074 8404 8184 7708	371 375 377 367 383 397 385 360	17 23 15 1	8380 /721 6221 8616 8224	385 365 393 409 379

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL GREEDING ORGANIZATIONS--GROUPED BY BRIEFL, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGÉ	BY 51	RE		н	RECURD AVE	RAGE	CY SIR	L BY	FRESHEATAG	YEAR				
SIKE NO.	DAUGHTERS ND.	RECORDS NO.		TEST PCT.		FRESH YEAR	KLCORUS NU.		TEST PCT.	FAT L8.	305-DAY (RECURDS NO.			YEARLY HE RECORDS NO.		
						1958 1959 1960	JUERN 6 3 1	6828 6828 8580 9060	4.6 4.6 5.2	318 390 475	6 3 1	8073 9280 7570	367 428 357	5 3 1	6781 6011 9036	41'6 371 4,6
351345	5 3	7	7066	o•0	353	1952 1953 1954 1955 1956 1958	1 2 1 1 1	7170 7805 7300 8190 7560 6190	5.4 5.4 4.7 5.3	365 420 394 404 400 266	1 2 1 1 1	7610 9395 8600 10570 8970 6660	381 412 431 360 459 316	1 1 1	8240 0905 9505 6115	410 441 493 290
3530 <i>2i</i>	2	9	7397	5.4	392	1954 1955 1956 1957 1958 1959 1960	1 2 1 2 1 1	7620 7680 5930 7350 9160 8550 9640	5.7 5.5 5.0	339 467 330 397 454 438 479	1 2 1 2 1 1	8230 8965 8010 8360 7640 7230 9530	382 430 375 407 364 343 450	i 1 2 i 1	7990 8535 8170 8208 7968 9799	378 463 373 373 383 467
353113	3	4	6578	4.5	297	1950 1952 1953	1 2 1	6900 5950 9450	4.5 4.5	260 478	1	0<75 0≤8	404 383			
35.34.65	5 15	36	8164	4.9	396	1949 1950 1951 1952 1953 1954 1955 1958 1959	7 8 5 6 4 2 2 1	8866 7733 9660 8333 7585 7685 6415 11590 6020		441 380 489 405 354 373 295 533 262	1 3 5 4 2 2 2 1	7170 11537 10626 9332 8765 8985 7935 8240 7490	328 480 452 388 364 366 353 390 345	2 1 1	9075 8927 9091	387 373 425
353709	8	13	7736	5.3	403	1952 1953 1954 1955 1956 1957 1959	1 2 4 3 1 1	6730 6885 8338 7783 7100 9780 9230	5.3	351 366 432 424 384 483 510	2 4 3 1 1	3715 10020 9310 6610 9760 8290	453 494 461 324 475 384	3 2 1	9748 10028 8269 8480	470 493 470
353825	, 4	15	6502	ią "ią	287	1948 1949 1950 1951 1952 1953	1 4 3 3 2 2	7600 7388 6017 5906 5560 5610	4.0 4.6 4.5 4.5 4.3	305 339 269 267 240 243	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11610 11120 10820 10130 10110	415 379 383 364 372			
353834	3	7	85/3	5.4	462	1954 1955 1956 1957 1958	2 2 1 1	7970 7280 10380 9070 9210	5.3 5.0	434 389 516 505 469	2 2 1 1	10625 9605 10320 5480 11940	521 445 490 285 5 7 8	1 1 1	7521 6056 10715 11543	350 337 511
354084	5	8	7501	4.5	350	1956 1957 1958 1959	3 2 1 2	6180 8455 8800 9395	4.4 5.5 5.0 4.9	281 442 444 455	3 2 1 2	8723 9470 9100 9740	385 466 419 388	2 1 2	9505 9903	407 400 416
354147	1	1	6890	5.6	384	1955	ı	6890	0.6	38 4						
354224	134	277	7 307	4.7	342	1953 1954 1955 1956 1957 1958 1959	5 50 53 39 45 46 28	7126 7534 7073 7092 7113 7691 7519 9116	4.7 4.8 4.7	322 357 342 337 335 347 344 406	447 52 37 42 34 28	7440 8739 8575 8531 8334 8749 8240 8351	306 410 400 396 391 398 373 378	1 36 44 34 30 28 27	5022 8473 8961 5547 3043 8941 8818 9011	4, 6 376 4, 3 401 379 406 403 413
354504	66	111	7193	4.8	343	1953 1954 1955 1956 1957 1958 1959	3 11 22 21 23 20 9	6763 7284 7596 7190 7419 7397 7576 7480	4.9	313 554 372 350 342 331 345 364	3 11 22 21 23 14 8	9193 8919 8632 8687 9063 8334 8383 8910	412 413 415 398 404 388 372 418	1 10 21 21 15 13 9 2	8240 9197 0008 8480 8346 8807 8756 9505	410 432 402 408 383 409 397 490
354788	1	1	7620	5.2	395	1954	1	7620	5•∠	395	1	5980	283	1	6268	236
355736	1	3	10253	4.5	468	1953 1956 1958	 	8770 11590 10400	4.5	376 526 503	1	3710 7600	412 486	}	7903 662?	35 J 428
3562 15	5	12	8016	5.0	403	1948 1949 1950 1951	1 2 2 4	6750 92 7 5 8450 7655		337 475 418 390	1	5770 3550 8140 6870	293 414 418 348			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

332

GAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS		TEST PCT.	FAT	FKESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY (RECORDS	ONTEMP MILK LB.		YEARLY HE RECORDS NO.	MILK	FAT
140.	140.	140.	L0.	PC1.			GUERA	ISEY			140.	LD.	LO	40.	L8.	LB.
						1952 1956 1959		7540 7370 8540	5.0 5.0 5.0	3/4 3/0 430	1	8200 9490	397 430	1	9374 9363	438 443
35774	9 1	1	9520	4.6	436	1956	1	9520	4.6	436	1	10540	407	1	12873	471
35871	8 367	826	7530	5.1	382	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 38 58 57 62 64 88 88 84 63 76 104 99	7157 7927 7674 8014 8003 7768 7911 8193 8144 7504 7278 7875 7713	5.2 5.1 5.1 5.1 5.0 5.1 5.2 5.2 5.2 5.1 5.0 5.0	373 406 392 403 408 387 403 427 420 379 366 392 387	2 9 20 32 41 61 86 82 63 76 96 99	7785 9913 8438 8585 8382 8239 8358 8602 8651 8275 8548 8606 8065	3/1 442 419 396 381 380 390 403 399 375 381 377 351	17 81 73 65 71 88 90	8451 8214 8583 9057 8275 8929 9392 9066	385 387 405 43, 371 403 421 407
35891	2 1	4	6/73	5.3	361	1955 1956 1957 1958	1 1 1	7700 6500 6690 6200	5.3 5.4 5.3 5.3	409 350 357 329	1 1 1	8690 9470 10200	414 432 500	1 1 1	8676 8567	434 425 415
35462	3 10	16	6883	4.9	336	1957 1958 1959 1960	2 6 6 2	7130 6127 8152 6385	4.6 4.8 5.1 4.7	328 295 415 295	2 6 6 2	8980 9573 10720 8690	379 408 421 356	2 5 6 2	8497 9653 11280 8651	358 400 449 377
36020	7 94	250	6975	5.1	356	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 27 57 42 29 25 16 21 17 8 3	7760 6773 6883 7298 7372 8137 7908 7378 7377 7968 7773	5.2 5.2 5.3 5.3 5.1 4.9 5.0 5.1	407 352 353 334 387 412 362 370 366 389 368	1 9 32 36 29 25 15 21 15 8 3	8520 8558 8477 6351 8870 8975 8897 8689 9231 7724 9787	414 419 399 385 410 416 401 385 413 348 413	3 25 22 16 18 14 8 3	8629 8575 8658 9044 8288 8818 9212	421 409 415 419 37) 398 426 432
3632 l	4 59	136	8076	4.6	372	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 21 32 28 19 11 11 7	7710 7966 7854 8423 8361 8734 8553 7270 9948 8690	4.5 4.6 4.7 4.7 4.7 4.7 4.3 4.3	370 361 397 393 409 410 325 438 414	1 10 28 26 17 11 11 5 4	84 10 84 86 82 37 63 92 85 80 84 45 85 93 80 76 90 8 65 60	447 403 340 396 408 396 404 391 448 320	5 25 17 10 8 2 4	8450 8032 8754 8135 8322 8214 9818 7488	401 378 411 392 391 409 409 375
3638∠	6 5	9	8172	4.9	404	1953 1955 1956 1957 1958	4 2 1 1	8400 9190 8330 8000 14190	4.9 5.3 5.1 4.7 5.1	415 491 427 374 729	2 1 1 1	7660 9850 9010 8500 6540	359 475 445 393 381	2 1 1 1	7135 8840 9548 8404 8001	330 420 480 410 366
36431	3 19	31	7846	5.0	392	1955 1956 1957 1958 1959 1960	5 7 6 7	8408 7092 7353 7437 8079 7140	5.2 5.1 5.0 5.2 4.9	436 363 367 365 392 345	5 7 5 7 1	7956 7304 8330 8886 7811 9050	387 346 412 407 351 415	5 6 5 6	8395 7268 7152 8513 8638 8873	403 358 332 390 394 410
36480	3 1	2	9370	5.2	482	1953 1955	1 1	8060 10680	5.2 5.1	415 549	1	9460	469			
36606	2 72	152	7444	4.6	336	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 21 30 36 19 17 9 7 7	722 7 728 1 7611 7576 7849 8495 7922 8536 8459 9827	4.6 4.7 4.6 4.5 4.7 4.3 4.4 4.4 4.2	327 339 345 342 366 366 352 378 356 415	1 9 29 36 19 17 7 7	10750 9144 9341 9403 7021 10004 10006 8759 8291 3960	403 394 404 396 414 431 358 363 391	10 30 17 15 9 7 6 3	9116 6983 9004 10115 8692 9693 9113	301
36664	8 54	96	7993	4.7	377	1954 1955 1956 1957 1958 1959 1960	14 22 12 15 15 11 7	7983 7833 8005 8319 7613 8946 9660	4.8 4.7 4.7 4.3 4.8 4.6	383 363 379 398 379 408 427	14 19 11 14 10 11 7	8592 8632 9415 9065 8537 8742 9409	405 403 443 430 411 410 451	14 16 9 7 7	8246 8810 9136 8824 9553 9960 9656	421 423
36753	0 53/	670	7535	4.6	347	1954 1955 1956 1957 1958 1959 1960	29 122 96 143 144 104 32	7974 7793 7785 7753 7503 7942 8428	4.7 4.7 4.0 4.0 4.0	386 363 361 358 342 361 380	27 118 90 141 121 103 32	8937 8511 8545 8999 8626 8485 8350	419 396 394 408 387 379 373	25 108 90 104 109 94 31	8325 8742 8592 8431 9179 9084 9314	392 414 409
36782	9 /4	249	77+3	4.8	375	1948 1949	11 30		4.6	359 389] 5	8030 8362	345 414			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y 51	RE		R	ECORO AVE	RAGE 8	3Y 518	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORUS NO.		TEST PCT.		FRESH YEAR	KECOROS NO.		TEST PCT.		305-DAY RECOROS NO.	MILK		YEARLY H. RLCOROS NO.	MILK	
						1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	GUERN 33 33 42 31 23 15 13 7 6 4	7618 8012 8160 7587 8135 8235 8235 8338 7776 7385 10175 9560	5.0 4.8 4.9 4.8 4.7 4.6 4.5 4.8	379 384 396 369 391 385 349 352 493 425	13 20 28 28 22 13 11 6 4	8340 7793 7940 7630 7890 8108 7860 7837 8315 7823 7250	397 382 381 357 372 396 361 381 410 372 313	4 22 12 9 5 4 3	8609 7815 8395 8505 7732 8559 9556 7652	371 398 391 373 412
368488	2	10	8554	4.6	381	1953 1954 1955 1956 1957 1958 1959	1 2 2 2 1 1	4760 7950 9735 7170 7450 6490 7210	5.0 4.6 4.5 4.7 4.8 4.7 4.9	265 344 429 332 356 306 356	1 2 2 2 1 1	5820 8250 7345 8585 5910 6930 7740	306 410 442 406 280 321 362	2 2 2 1 1	8317 8006 8497 6235 6834 7597	393 411 367 319
368632	47	123	7570	4.7	359	1950 1951 1952 1953 1954 1955 1956 1957 1959 1960	12 27 22 22 12 15 6 5	8371 7241 7939 8009 9164 9008 8178 9028 11430 4000	4.8 4.9 4.8 4.8 4.7 4.5 4.8 5.3	394 351 380 383 439 425 369 436 602 163	5 10 15 13 12 12 6 5	8836 9533 9187 9113 9054 9028 9262 8908 8310 6900	411 405 409 402	5 11 12 6 4 1	8853 9057 9105 9178 9284 8339 6791	411 413 414 424 412
372034	9	28	8016	5.0	405	1948 1949 1950 1951 1952 1953 1954	5 4 5 3 7 4 2	9290 7953 8132 8437 7530 8145 7670	5.1 5.0 5.2 5.1 5.2 4.8 5.1	472 403 420 431 386 395 395	1 1 2 1 5 4 2	12080 8480 9150 8540 8440 8155 6875		2 2	9058 7908	407 390
372994	1	2	95 30	5.3	496	1953 1956	1	10150 8910	4.5 6.0	458 533	1	11070	499	1	8208 11 72 8	359 555
373403	1	3	8073	4.9	391	1950 1951	2	7340 9540	4.9	355 464						
373766	24	50	7673	4.8	362	1955 1956 1957 1958 1959 1960	2 11 15 13 8 1	9430 8375 7300 7233 7226 9490	4.6 4.8 4.9 4.7 4.7	431 398 358 336 337 444	2 11 15 11 8 1	8350 8507 8033 8617 8583	398 390 394 388 371 444	2 11 12 11 7	8731 8738 8324 9279 8950	
374∠89	2	3	7020	5.2	364	1957 1958 1960	1 1 1	5930 6770 7690	4.8 4.8 5.5	286 322 424	1	8740 7890 9840	384 334 460	1	8524	427
375194	171	404	7100	4.9	342	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 14 46 89 74 49 35 27 27 24 7	0207 7043 6815 7343 7329 7620 8148 7491 8008 8321 8924 9358	4.8 4.8 4.8 4.6 4.6 4.6	413 351 333 357 355 369 393 359 370 378 400 432	2 2 15 58 76 47 35 26 25 19 7	8320 9080 8591 8478 8031 8232 8821 8857 9157 8318 8136 8960	375 386 405 402 409	22 45 33 27 22 18 7		388 398 419 392
375262	1	1	10450	5.4	564	1958	1	10450	5.4	564	1	7280	333	1	7009	346
375476	52	108	7182	4.8	345	1953 1954 1955 1956 1957 1958 1959	4 14 21 10 18 26 14	7193 7309 7379 7802 7028 7292 7741 7350	4.9 4.8 4.8	345 355 353 372 338 349 356 365	4 11 18 0 17 17 14	7415 8700 8608 7691 7724 8768 8837 8140	393 351 361 405 406	1 7 18 7 13 17 14	8735 9068	400
376720	1	2	8410	5.0	421	1952 1953	1	8760 8060	5.1 4.9	449 3 95						
377661	19	49	6645	4.8	318	1951 1952 1953 1954 1955 1956 1957 1958 1959	8 11 8 6 7 2 2 2	6781 7096 6835 7779 7910 8505 6110 0035 7920	5.0 4.7 4.0 4.7 5.0	334 345 334 384 376 391 288 404 347	4 5 6 8 6 2 1	8745 8282 8267 8424 8275 6745 7080	404 392 394 361 327 347	7 6 2 1	8455 9369 8066 7630 3764 8567	400 400 363 438

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEUING ORGANIZATIONS--GROUPED BY BREEU,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE	8Y SIRE	RECORU AV	LRAGE BY SIRE BY	FRESHLNING YEAR	
SIRE DAUGHTERS RECORDS NO. NO. NO.	MILK TEST FAT LB. PCT. LB.	FRESH RECORDS	MILK TEST FAT		YLARLY HERD AVERAGE RECORDS MILK FAT NO. LB. LB.
		GUER	NSEY		
378091 I I	8390 5.2 438	1956 1	8390 5.2 438		
37 85 38 6 9	7756 4.8 374	1954 1 1955 4 1956 2 1957 1 1959 1	8470 4.5 383 7605 4.9 376 7415 5.1 375 7920 4.5 356 8220 4.4 362	4 9890 449 1 8270 411 1 9570 438	1 8066 383 4 9380 440 1 9690 483
378581 93 198	7466 4.8 355	1951 1 1952 11 1953 26 1954 34 1955 26 1996 16 1957 31 1958 28 1959 21 1960 4	6060 4.8 271 6895 5.0 341 7568 4.7 352 7465 4.8 366 7243 4.9 359 7680 4.7 368 7834 4.7 368 7924 4.6 362 7658 4.7 363	7 8620 577 22 8266 574 32 9150 386 25 228 390 16 8801 384 51 8593 570 25 8737 399 21 8770 392	7 8166 378 32 8750 377 22 9062 387 15 9127 413 28 8858 392 24 9413 426 21 9065 408 4 9382 423
378/21 38 85	6891 5.2 353	1948 2 1949 15 1950 20 1951 17 1952 14 1953 9 1958 1 1959 1	7490 5.1 578 7469 5.2 585 6773 5.3 554 7026 5.2 562 7317 5.0 365 5954 5.0 294 6732 5.1 344 6570 4.7 310 6820 4.8 325	3 9513 42≥ 4 7718 377 6 7717 36₀ 7 8354 390 8 7619 353 6 8903 408 1 5650 260	6 7959 37h 1 6507 29c 1 6507 293
378722 258 S64	7261 5.0 359	1949 11 1950 31 1951 47 1952 72 1953 87 1954 104 1955 94 1956 54 1957 34 1958 29 1959 17	7532 5.1 380 7433 4.9 360 6494 4.9 318 6988 5.6 345 7227 5.0 361 7739 5.0 369 7527 5.0 379 7512 4.9 365 8171 4.7 387 8055 4.7 376 9010 4.8 433	12 8646 416 21 7805 368 46 8500 389 79 7949 37 103 5480 400 95 8642 407 54 8518 597 34 8031 375 26 7860 36	23 6412 400 94 8130 365 84 6405 403 50 8609 413 51 8083 392 25 8502 394 15 9186 429 3 9726 444
379457 4 7	7854 4.9 382	1951 1 1952 1 1953 1 1954 3 1955 1	9250 4.3 396 8980 5.4 483 7890 4.6 376 7363 4.9 356 10810 4.7 513	1 6930 368 1 6410 318 2 7645 354	1 7674 37 2 2 8566 406 1 8753 435
379863 239 516	7322 5.1 373	1949 2 1950 19 1951 38 1952 55 1953 60 1954 65 1955 51 1957 51 1958 57 1958 57 1959 43	7380 5.5 392 7255 5.2 375 7792 5.1 397 7867 5.3 414 7339 5.2 378 7549 5.1 369 7614 5.1 304 7338 5.0 364 7708 5.1 390 7871 5.0 304 7708 5.1 390 7871 5.0 304 708 4.8 410	4 8570 407 20 52.22 387 32 8408 391 55 7851 367 64 8076 579 62 8451 405 50 8176 372 51 8591 372 43 8592 371	10 8453 412 61 7944 374 56 8455 398 46 8988 426 49 8183 379 45 9038 461 40 9283 413 11 9315 414
380572 185 372	8326 4.3 358	1952 d 1953 33 1954 47 1955 48 1956 37 1957 63 1958 62 1959 60 1960 14	7315 4.5 551 8429 4.4 372 8833 4.4 388 8961 4.4 350 8431 4.2 554 8630 4.3 372 8008 4.3 342 8925 4.3 340 6256 4.1 341	33 8682 378 46 9036 394 48 9247 395 37 8695 373 63 9420 392 57 9296 381 60 9130 383	11 6391 379 44 8771 589 37 9212 405 35 9036 388 51 8829 380 54 9993 415 57 9775 415 13 10239 412
380723 12 32	7700 5.0 387	1951 4 1952 7 1953 5 1954 5 1955 0 1957 2 1950 2 1959 1	8013 5.1 411 7066 5.1 361 7384 5.1 378 8404 5.0 417 7800 5.0 391 8145 5.0 429 7790 5.1 397 7550 4.6 347 3850 4.7 181	4 8365 395 4 7893 370 5 8518 386 4 10120 458 2 8450 384 2 8335 370 1 6730 357	2 8443 403 5 8371 3/5 8 8934 418 2 8737 403 2 9187 424 1 9278 401 1 9145 410
381020 1 1	6270 4.9 309	1954 1	6270 4.9 309	1 7460 351	
381430 65 150	7079 4.8 336	194.9 22 1950 31 1951 30 1952 22 1953 14 1954 12 1955 5 1956 2 1957 5 1958 2 1959 4	7162 4.7 348 7194 4.7 338 71574 4.7 338 7574 4.6 369 7712 4.6 369 6816 4.6 300 7745 4.8 369 7356 4.8 349 6080 4.2 259 6625 4.4 303 8380 4.2 350	5 8410 3hy 10 8e,20 410 12 8071 378 11 8345 377 12 8490 390 5 7902 377 2 8615 398 5 8712 388 2 7350 351 4 7473 345	4 8115 378 9 8398 376 4 8183 387 1 8306 393 2 7164 367 1 8785 429 4 8396 351 1 9768 472

TABLE 15.--OAUGHTLR-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTEK	AVERAGE	8Y 518	RĿ		R	ECORD AVE	RAGE 8	Y 51R	E 8Y	FRESHENING	YLAR				
SIRE NO.	DAUGHTERS NO.	KECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORÚS NO.		TEST PCT.	FAT L8.	SOS-DAY (RECORDS NO.			YEARLY HE RECORDS NO.	RO AVE MILK LB.	
							GUERN	SEY								
382229	2	5	8186	4.8	386	1957 1958 1959	1 2 2	9120 8585 8120	4.5 4.8 4.8	414 409 384	1 2 2	9150 7055 7995	395 338 345	1 2 2	9/23 8061 8459	461 371 385
382950	, ,,,	196	7231	4.7	338	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 20 32 44 52 24 16 9 7 5	9314 7297 7356 7130 7329 7385 7878 7574 7020 8400 7920	4.0 4.7 4.6 4.7 4.6 4.7 4.6 4.4 4.4	430 340 352 336 339 345 360 348 305 367 345	2 7 12 22 29 23 15 <i>I</i> 6 2	11280 8936 9174 8867 8938 8987 9248 9619 8552 7700 8125	506 409 396 385 386 381 397 397 348 329 347	10 18 15 7 6 2	8405 8856 8995 9147 8411 8415 9407	383 379 383 40d 356 361 414
384064	, 34	90	6883	5.0	342	1952 1953 1954 1955 1956 1957 1958 1959	7 13 22 15 10 10 9	6489 6912 7422 7521 6140 7419 7067 6965	5.0 5.1 4.8 4.9 4.9 4.9	319 349 376 357 300 364 345 334	2 11 21 14 9 9	7830 8239 8752 9186 7663 8726 8132 7158	388 408 401 350 386 392 346	3 19 12 9 8 4	8033 8709 8959 8603 7914 7992 8194	382 402 398 339 362 367 398
385031	71	125	7055	4.8	341	1956 1957 1958 1959 1960	6 24 34 50	6868 7140 7834 7122 7758	4.7 4.8 4.9 4.9	319 344 381 347 372	6 24 34 50	8115 8654 8769 8719 8665	371 397 390 387 376	6 22 32 49 11	7734 8181 9121 9282 9495	367 365 406 419 424
385457	' 21	63	7325	4.9	358	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 10 13 12 9 5 6 3 2	8390 8225 7008 7031 8724 8658 8297 8990 7815 9830 8550	4.7 5.0 5.0 5.0 4.7 4.6 4.4 4.3 4.0 4.0	398 387 347 345 430 405 579 397 329 448 395	5 7 9 5 6 3 2 1	9288 9384 9751 9596 9472 9178 10763 9910 10980 11200	391 427 427 409 419 390 448 425 442	3 4 6 3 2 1	9494 8621 9559 10740 9641 11554 11728	4/3 397 414 448 420 475 468
387217	7 32	ង 8	7582	4.7	357	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 15 17 13 13 9 3 6 7 2	7037 7151 7935 8089 8268 9057 7327 8488 8514 7220	4.1 4.1 4.9 4.7 4.6 4.9 4.8 4.4	332 337 372 394 394 434 359 406 374 329	4 8 12 11 7 2 5 4 2	9523 8531 8233 9082 10209 8185 8836 8023 7660	393 380 370 407 424 359 396 358 337	2 10 7 2 3 5 2	8971 9245 11113 6731 9974 9740 8453	450 401 461 410 425 416 380
388430) 172	422	7190	4.6	355	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	8 48 56 53 36 47 52 47	8603 8017 7807 8397 9323 8369 7982 7671 7524 8371	4.0 4.0 4.0 4.0 4.5 4.5 4.5	390 371 357 385 386 386 355 344 338 362	6 35 55 52 50 33 44 43 45	8497 8786 8910 9108 9240 8987 9135 8955 8798 9463	390 395 394 398 418 397 396 379 381 413	25 47 44 30 42 40 44	8567 8781 9172 9373 8993 10206 9919 10395	403 389 411 425 401 430 421 435
388784	1	1	8000	4.7	412	1956	1	8800	4.7	412	1	4290	371	1	9450	374
389862	2 60	73	6856	4.8	332	1958 1959 1960	13 44 16	7104 6826 6422	4.8 4.9 4.6	344 332 305	13 44 15	8601 8215 8609	364 361 365	13 41 15	8930 8942 95 7 8	379 392 418
3 9 00 घС) 45	88	6734	4.8	323	1954 1955 1956 1957 1958 1959 1960	8 16 14 15 20 12 3	8676 7310 6996 7255 5841 6397 5673	5.0 5.0 5.1 4.7 4.7 4.7	431 358 353 337 275 295 281	8 14 13 15 18 12 3	9726 9353 8725 9100 8576 9063 7097	415 424 387 391 346 376 278	7 14 12 14 17 11 3	9394 9471 9535 8959 9668 9366 10351	403 421 398 393 408 396 419
39 04 48	3 20	51	9104	5.2	478	1955 1956 1957 1958 1959 1960	10 8 11 13 7 2	9195 8394 9204 9272 9939 9285	5.2 5.4 5.1 5.3 5.1 4.7	482 454 471 494 513 438	9 8 10 9 7 2	9118 8403 9321 8729 9204 10815	439 404 446 414 432 455	9 8 7 9 7 2	8495 9216 9334 9161 9595 10906	437 437
390507	7 283	684	7561	5.0	380	1950 1951 1952 1953 1954	21 42 78 101	7310 7241 7522 7644 7736	5.0 5.0 5.0 5.0	369 369 378 385 398	5 18 43 85 114	8706 8776 8720 8369 8646	397 397 408 395 406	32 1G4	8651 8312	410 3/3

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

336

DAUGHTER AVERAGE BY SIRE

	OAGGINIER	AVERAGE	01 311			,	LCORD AT	. KAUL L) I J I N		I KESHENI NO	LAK				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT Lö.	305-DAY (RECORDS NO.			YEARLY HI RECORDS NO.		
						1955 1956 1957 1958 1959 1960	6UERN 114 64 59 50 28	7967 7967 7975 7871 8574 8337 6844	5.1 5.0 5.0 4.9 4.7 4.8	404 400 390 424 388 336	110 62 56 30 28 7	8765 8642 8787 8956 8251 7126	408 399 418 408 383 325	104 55 54 38 27	8816 8959 8589 9323 8965 8627	414 426 408 429 419 408
39091	5 1	3	6991	4.8	336	1954 195 <i>7</i> 1958	1 1 1	9330 6540 5120	4.9 4.8 4.7	456 312 240	1 1 1	3650 9560 8650	371 400 352	1	11478 10878	420 376
39122	5 458	1096	7754	4.8	371	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	16 57 85 124 141 152 99 140 145 105 32	7971 8038 7983 7743 7949 7862 8037 8045 7944 8007 7550	4.8 4.9 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	319 393 386 313 380 380 382 384 378 372 356	6 21 60 107 131 150 98 138 122 105 32	8665 8344 8329 8200 8570 8826 8520 8738 8616 8098 8178	418 374 379 374 395 401 393 401 394 394 360	37 122 133 92 98 106 97 31	8264 8354 8953 8624 8446 9612 9548 9390	382 384 410 403 395 429 423 421
39198	В 11	14	6735	5.1	344	1958 1959 1960	5 8 1	8158 6806 3390	5.0 5.2 5.0	408 355 170	5 8 1	10230 9940 3910	439 429 167	5 7 1	10351 10472 9265	448 461 419
39228	8 7	25	8252	5.0	415	1953 1954 1955 1956 1957 1958 1959	2 7 5 2 4 3 2	7460 8449 8664 9805 8313 9193 9110	5.0 5.0 5.2 5.1 5.0 5.0	372 427 451 467 412 453 446	2 7 4 1 4 2 2	7570 8373 8378 9520 8873 9065 8845	353 420 408 435 420 427 418	4 1 3 2 2	8036 9172 9756 9846 7265 9009	
39301.	3 18	34	8280	4.9	399	1956 1957 1958 1959 1960	1 7 12 11 3	8530 6779 8756 8995 7923	4.8 4.8 5.0 4.7	370 327 421 440 356	1 7 12 11 3	9620 9269 9145 8903 7117	365 418 408 387 331	1 7 12 11 3	9832 8602 9127 9616 7201	
39323	6 2	2	6530	5.0	333	1953 1955	1	5000 8060	4.5 5.5	224 441	1	10020	439			
39476	4 45	64	6402	4.9	313	1957 1958 1959 1960	5 23 31 5	7582 6567 6714 6564	4.8 5.0 4.9 5.0	365 326 329 316	5 23 31 5	9202 8585 8848 8120	406 387 394 351	2 22 30 5	8791 9301 9361 9775	426 423 421 427
39510	0 35	75	7353	4.6	339	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 19 16 16 9 5 5 5	10390 7483 6618 7478 8629 8480 7744 7907 7320	4.4 4.7 4.7 4.7 4.5 4.4 4.2 4.4	461 348 309 350 389 377 330 345 327	1 9 15 16 9 5 5 2 1	12370 8310 8247 8526 9502 8776 9642 8200 6010	480 390 371 385 441 411 431 396 291	5 13 8 4 5 2 1	8676 8561 9070 8927 9149 8497	390 372 418 428 398 399 409
3 9 552	8 56	155	7505	4.9	366	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	8 19 19 20 19 13 10 19 18 9	9190 8141 7550 7383 7409 8632 7751 7348 6356 7150 8680	4.9 4.8 4.7 4.9 4.8 4.8 4.8	445 390 356 361 359 413 375 355 305 343 417	2 10 12 19 19 13 10 19	9410 9610 9483 8668 8086 9005 8614 8756 8146 7799 5500	454 409 394 371 369 415 411 401 375 351 249	10 18 13 10 16 15 9	8415 8095 8918 8740 8321 8533 8798 5723	373 363 400 414 379 396 404 274
39606	8 1	2	8525	5.6	475	1956 1957	1 1	9470 7580	5.6 5.5	532 418						
39615	2 90	230	7471	5.0	369	1950 1951 1952 1953 1954 1955 1956 1957 1958	1 7 19 34 51 44 27 20	6390 7377 7248 7332 7989 7780 7619 7541 8861	4.6 4.9 5.0 5.0 5.0 5.0 4.8 4.8	296 356 363 365 394 384 381 360 414	1 4 11 30 48 42 25 19	8600 8330 8914 8470 8948 9057 8799 8558 8272	367 370 411 395 414 412 407 401 384	10 42 38 24 18	8492 8458 8855 8779 8760 8184	401 393 413 413 424 387
7010-			71		7.4	1959	7 3	9311 8877	4.6	405 412	7 3	8666 8273	381	7 3	9081 8295	427 387
39699 39762		1	7410 6813	5.0 4.8	368 322	1954	!	7410 6720	5.0	368 294	!	6870 7430	362	1	7597	374
						1958 1960	}	6900	5.0	345 353	1	7370 6770	340 300	1	7990 7129	378 336
39922	6 51	79	6351	4.5	284	1955 1956	3 8	7530 8166		321 362	3 8	8797 9890	410	8	8513 9533	3/1 411

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY BRELD,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OF FRESHENINGRECORDS			ORGANIZATIONSGR	OUPLO BY
OAUGHTER	AVERAGE BY SIRE	RECORO AVA	CRAGE BY ST	RE BY FRESHENING	YEAR

	UNU DITT EK	MYENAUE	01 316			K	ECURU AVI	CRAGE I	21 21K	L BY	FKESHENING	TEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRE5H YEAR	KECOROS NO.		TEST PCT.	FAT L8.	SOS-DAY (RECORDS NO.			YEARLY HI RECORDS NO.	ERO AVE MILK L8.	FAI
						1957 1958 1959 1960	GUERI 25 26 12 5	6220 6431 7657 5836	4.6 4.5 4.1	284 300 346 243	25 24 12 5	8562 8723 9713 7764	39 I 385 39 7 325	20 23 11 5	6772 9399 10501 10564	350 417 434 435
399670	182	447	7363	5.0	365	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 26 44 103 103 63 27 32 33 10 5	8150 7207 7883 7343 7527 7798 7650 7712 8012 7097 9894	4.9 4.6 4.9 5.1 5.0 5.0 4.9 4.8 4.7	400 344 378 372 332 391 378 380 390 330 466	13 65 78 53 25 32 25 10	8311 8269 8454 8750 8770 8952 8638 8258 9016	387 335 397 408 404 414 405 359	222 72 48 23 30 23 10	8765 8137 8780 8765 8734 9049 8862 9690	403 386 412 411 407 432 397 402
399671	. 2	6	8073	5+6	452	1954 1955 1956 1957 1958	1 1 1 1 2	8000 6890 9370 7580 8590	5.9 6.3 6.2 4.8 5.6	474 438 583 364 484	1 1 1 1 2	8770 8640 9030 8670 8600	424 425 443 422 433	1 1 1 2	8949 8742 8916 8715	424 424 436 425
399883	3 13	25	7512	5.0	368	1950 1951 1952 1953 1954 1957 1958 1959	4 7 7 2 2 1 1	7343 6821 7347 8495 8390 9540 9200 7330	5.3 5.2 5.1 4.6 4.9 4.5 4.3	386 350 370 392 408 426 396 315	1 2 2 2 2 1 1 1	8750 3815 7930 9055 7290 8660 7810 6790	443 425 374 381 332 401 348 299	2 1 1	6764 10399 8306 8349	314 464 383 378
400062	2 1	1	5580	5.8	323	1958	1	5580	5.8	323	1	7430	367	1	8066	391
40129	5 53	103	7714	4.9	379	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 9 17 23 19 8 11 9	6190 7476 7520 7830 8570 8258 7341 7659 10470 7975	4.3 4.8 5.0 5.0 4.9 5.0 5.2 4.8 5.0	264 359 360 389 431 398 370 398 506 397	1 4 13 22 19 8 11 7 4 2	7190 8480 9173 8930 9429 9225 9295 8149 8325 7970	306 386 406 409 437 422 423 414 402 398	5 19 17 7 8 7 3	8735 8922 9035 9642 8414 8644 9200 8562	403 407 416 447 382 417 453 435
40 18 1	4 17	23	6968	4.6	323	1958 1959 1960	7 11 5	6997 7480 7110	4.8 4.5 4.8	340 343 343	7 11 5	8687 9523 8744	386 413 381	7 11 5	9334 9674 11181	427 420 480
401978	3 8	18	7031	4.9	345	1953 1954 1955 1957 1958 1959	4 5 2 3 2 2	7743 5774 7105 8050 9165 10360	4.5 4.9 5.1 4.5 5.0 5.1	352 281 356 366 455 528	4 5 2 3 2 2	8500 7850 9520 9647 9340 11095	377 368 478 450 406 505	3 2 3 2 2	9348 8366 8792 10344 10246	414 414 420 466 457
40883	1 38	78	7814	4.7	365	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 12 18 13 11 5 10 3	7070 8250 7850 7467 8004 7881 8922 9436 8317	4.3 4.6 4.7 4.8 4.7 4.7 4.6 4.5	311 359 359 349 380 366 417 440 368 460	12 18 12 11 5 6 3	9046 8937 8685 8162 9604 9652 7613 7550	394 389 392 364 411 430 355 375	1 14 12 11 3 5 3	8371 8560 8338 8613 10846 10575 8484 8646	361 377 367 385 416 470 389 412
40903	2 150	326	7756	4.8	370	1953 1954 1955 1956 1957 1958 1959	4 46 60 41 68 60 37	7817	4.9 4.9 4.8 4.7	379 379	39 68 45	7570 8475 8646 8467 8686 8777 8341 7362	407 400 398 396 385	2 42 52 37 43 40 33	8022 8202 8851 8448 8475 8927 9306 9007	422 409 400 406 426
40976	2 2	5	6218	5.4	335	1951 1952 1953 1954	2 1 1	6345 5070 4480 5150	5.2	266	1	9850 9530 10030 10860	337 370	1	10519	376
40979	4 27	51	6950	4.7	325	1954 1955 1956 1957 1958 1959	2 9 12 9 7 3	8441 6727 7048 7643	5.0 4.7 4.6 4.8 4.7 4.6 4.7	383 316	8 12 9 9 7	10300 8640 9813 9606 3544 8549	380 419 417 369 358	2 9 12 9 9 7 3	8030 9649 9393	389 440 370 417 463
41089	0 10	17	6729	4.5	303	1953 1954 1955	1 2 3	6500	4.9 4.1 4.4	266	2	8125		2	7723 8146	

PENNSYLVANIA

TABLE 15.--OAUGHTER-AVERAGE OF SIKLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

338

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIKE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	B1 21K	E		K	ECOKD AVE	KAGE 8	31 2 IK	E 81	FKLSHENING	TEAK				
SIRE D	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.			FAT L8.	305-OAY (RECORDS NO.			YEARLY HE RECORDS NO.		FAT
						1956 1957 1958 1959	GUERN 3 5 2 1	6833 7004 6945 7240	4.8 4.6 4.1 4.0	325 316 283 290	3 5 1	7403 7960 11210 9980	356 355 431 395	3 2 1	7757 7930 11968 12786	380 376 462 474
411967	32	66	7920	4.8	383	1953 1954 1955 1956 1957 1958 1959	5 6 14 10 10 13 7	7242 8753 7393 7807 7916 8959 9356 7140	4.7 5.0 4.9 4.8 4.8 4.8	345 436 361 383 382 431 448 363	4 6 13 10 10 9 7	8593 9592 8778 9335 9667 9579 10007 6410	378 424 400 440 449 436 453 311	14 12 10 8 6 6	9328 9316 9608 9613 10580 11236 8578	413 426 463 457 475 511 425
413242	48	94	7348	5.1	373	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 1 7 22 21 15 4 7 8 7	5930 4720 7109 7476 7332 7813 7603 8470 8470 8193 7680	4.7 5.3 5.1 5.0 5.2 5.3 5.3 5.2 5.0	296 223 372 377 369 407 407 445 439 409 382	1 3 21 20 15 4 7 7 7	8210 9150 8431 8532 8340 7950 8403 9371 9090 6690	402 409 396 391 400 407 425 454 444	7 18 15 4 7 7 7	8581 8571 8368 9222 8215 8524 9095 6878	384 396 395 490 427 426 445 368
414145	J	3	10873	4.8	520	1956 1957 1958	1 1 1	12050 10560 10070	4.8	552 507 501	1 1 1	9900 8990 7530	491 461 377	1	9134 8960	344 447
415353	1	2	9355	4.7	440	1954 1955	1	9120 9590	4.6 4.8	421 459	1	8790 7970	390 375	1	8764	414
416480	23	43	7657	4.8	363	1956 1957 1958 1959 1960	2 7 14 18 2	8150 8683 7495 7353 8700	4.7 4.7	387 424 350 345 399	2 7 14 17 2	8570 10299 9262 8844 8580	391 432 389 363 349	2 6 13 14 2		422 426 429 386 382
416952	42	89	7192	5.0	359	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 13 29 21 10 6 4 1	6597 8125 7086 7650 6838 7403 7295 13540 7150 5740	5.1 5.0 4.9 4.6 4.5	366 400 352 391 338 351 538 614 342 262	10 27 21 10 6 4 1	8454 8314 8457 8073 8367 7880 10060 8330 6520	374 394 398 380 388 349 469 400 304	10 20 9 6 3	8659 8432 8477 8771 8113 7728 7194	393 391 409 413 369 392 349
417207	1	6	8023	4.6	376	1952 1953 1956 1957 1958 1960	1 1 1 1	9030 7830 9050 9730 9010 3490	5.1 4.9	457 397 447 470 355 130	1 1 1 1 1	7940 8730 10010 9200 8670 4200	361 411 487 444 407	1	8088 7586 9461	385 359 ·
417736	59	120	7 452	4.6	339	1952 1953 1954 1955 1956 1957 1958 1959	6 29 28 18 6 14 10 6	6627 7825 7654 7666 6921 7601 7374 7392 7170	4.6 4.7 4.4 4.2	305 354 353 354 318 352 326 314 306	2 24 26 17 8 14 10 6	7460 8359 8379 8864 7888 8799 8191 7917	353 383 384 404 378 404 378 353 421	6 24 17 7 8 8 6	8055 8646 8960 8887 8790 8284 8953	367 390 406 407 407 387 397 445
418392	2	9	8249	4.7	389	1952 1953 1954 1955 1956 1957 1958	1 2 2 1 1 1	8400 7310 8170 9350 8580 8810 8980	4.8 4.5 4.6 4.9	422 348 369 432 418 408 408	1 2 2 1 1	9310 7655 7625 6180 6800 8530	386 333 328 305 348 439	1 2 1 1	8873 8295 6486 8317 7456	361 315 422
419915	2	2	8125		391	1952	2	8125	4.8	391	0	0.070	. 7.0			
419979	63	120	7662	4.8	364	1952 1953 1954 1955 1956 1957 1958 1959 1960	14 25 23 17 9 11 8 10 3	7959 7781 8080 8319 7554 7305 7286 7897 6903	4.7 4.9 4.9 4.9	374 367 382 408 367 357 345 361 312	9 22 23 16 9 11 8 9	9878 8626 9164 9217 9113 8948 8750 8492 10930	435 388 420 428 424 391 382 372 466	10 22 16 9 8 6 6	8832 8985 9020 9600 8828 8653 9243 10555	410 424 449 429 379 412
419988	7	11	8021	5.0	401	1955 1957 1958 1959 1960	1 1 3 5 1		5.3 5.0 4.9	456 358 444 389 476	1 1 2 5	11390 8100 8365 9652 7150	466 376 405 412 332	1 2 4 1	9146 10344 10017	
420224	148	308	7136	4.9	344	1951 1952 1953 1954 1955	6 14 31 55 53	8615 7559 6744 7444 7618	5.0	411 375 338 361 375	5 11 29 51 53	7912 7673 7828 8438 8612	380 355 369 386 402	8 52 48	7936 8239 8566	3/1 385 402

TABLE 15.--OAUGHTLK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTLR	AVI RAG.	BY	STRI
DAGGITTER	MALKAGE	01	SILL

	DAUGHTER	AVERAGE	01 311				ELUKU AV	ERAGE E	ST STR	EUY	FRESHENING	YEAR				
SIRE. NO.	DAUGHTERS NÚ.	RECOROS NO.		TEST PCT.		FRESH YEAR	KI CORDS NO.		TLST PCT.		AUS-DAY (RECURDS NO.	MILK	. AV. FAT LB.	YEARLY H RECORDS NO.		FAT
						1956 1957 1958 1959 1960	39 39 21 7	7050 7050 7399 7604 7687 7441	4.9 4.9 4.9 4.8	346 358 372 366 356	42 38 34 21 6	8346 8416 8419 8230 7852	374 387 381 376 373	39 35 32 19 7	8277 8263 8431 9178 8835	385 383 380 421 414
421105	104	226	7485	4.9	362	1951 1952 1953 1954 1955 1956 1957 1958 1959	18 47 39 33 17 17 25 22	7888 7361 7540 7952 8796 6134 8276 8049 7642 8508	4.8 4.9 5.0 5.0 4.6 4.5 4.5	381 349 366 400 438 403 383 370 347 385	1 11 45 37 32 16 17 22 22 3	11870 8234 8564 8600 8520 8d07 8505 8949 9295 9257	499 398 392 403 406 425 386 388 390 412	7 35 29 14 13 20 22 3	8946 8681 8635 8909 9049 9470 9524 8709	385 411 419 431 425 413 410 400
422644	2	ц	8140	5.0	405	1954 1955 1956	1 2 1	9550 7545 8120	4.4 5.7 5.0	418 397 406	1 2 1	6950 8150 8550	350 393 391	1 2 1	7674 7930 9091	386 385 440
423102	1	1	3740	4.3	161	1954	1	3740	4.3	161	1	9300	322	1	10846	378
423722	1	1	9530	5.1	486	1959	1	9530	5.1	486	1	6330	321	1	9450	449
4257 54	o5	179	8513	4.7	39в	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 10 21 42 33 24 13 19 9	8410 7684 8260 8423 8778 8563 8042 9554 8559 8494	5.2 4.8 4.8 4.7 4.7 4.6 4.6 4.6	433 367 392 397 416 412 372 434 387 384	1 8 21 42 33 24 13 16	8680 6374 8449 8707 8686 8718 9137 9044 8421 8814	415 405 394 407 412 422 413 421 383 376	3 41 28 22 11 14 9	8142 8545 8672 8911 8199 8790 9625 10336	355 403 414 433 386 463 443
423757	21	56	7410	4.9	356	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 4 8 14 4 6 8 5 4 2	8360 7658 8179 7886 8000 8317 7463 9458 8190	4.1 4.7 4.8 4.9 5.1 4.8 4.4 4.5	343 344 375 377 391 422 351 419 380 447	2 8 14 4 6 8 3 4 2	7695 9343 8766 9325 9538 9218 9430 7703 9260	359 421 414 441 439 421 419 381 400	2 14 4 6 6 3 3 2	7805 8954 9440 11184 7834 9425 8822 10105	366 419 451 496 371 430 444 440
424984	45	98	7481	5.0	371	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 9 9 9 6 8 15 17 19 5	6800 7997 9046 9760 9260 9118 7097 7655 7287 7190	5.4 5.1 5.0 4.9 4.8 5.0 5.0 5.0	367 404 450 470 450 435 351 382 364 354	1 6 8 6 7 14 13	8770 8738 9768 9281 9652 10081 8427 9052 8007 7196	462 413 426 415 426 416 377 393 356 316	3 8 6 7 12 13 17 5	8629 9348 9216 9749 8586 9287 9012 10706	405 418 408 423 377 402 403 470
425918	21	56	7153	4.8	343	1952 1953 1954 1955 1956 1957 1958 1959 1960	3 11 12 10 5 7 4 2 2	7510 6878 7601 7299 7332 8159 7823 8060 7135	4.6 4.9 4.8 4.8 4.9 4.9 4.9	341 338 365 346 364 397 376 364 351	2 10 12 10 5 7 4 2 2	10755 8451 8633 7720 8400 8617 8453 6645 8265	401 379 393 360 387 411 390 331 387	4 11 8 5 6 2 2 2	8513 8543 8785 8775 8295 8993 8747	372 393 402 408 402 436 438 419
426033	35	91	7878	4.8	379	1953 1954 1955 1956 1957 1958 1959	8 14 15 14 13 14 13	7920 8280 8991 7331 7928 9036 7382 7263	4.9 4.9 5.1 5.0 4.9 4.8 4.7	388 407 454 364 390 439 353 361	8 14 15 11 13 13 13	9101 8766 8927 9077 9079 8702 8610 6873	411 408 415 416 431 412 402 355	2 13 15 11 7 12 12 3	9205 9128 8786 6733 8410 9239 9296 8731	417
426173	3 1	1	5280	5.8	30s	1958	1	5280	5.8	305						
426820	87	192	7635	4.6	353	1953 1954 1955 1956 1957 1958 1959 1960	34 34 36 31 30 25	7970 7426 7575 7676 8156 7572 8304 8427	4.6 4.6 4.7 4.8	347 343 349 361 386 347 377	3 20 33 35 30 22 25	7577 8049 8167 8628 8315 8265 8950 8761	343 384 391 408 411 381 400 381	17 25 31 23 20 24	7602 8573 5040 8275 8767 9512 9349	361 407 386 370 406 434 412
42815	5 I	1	9730	4.7	461	1958	1	9730	4.7	46 l	1	8900	367	1	9908	417
428156	1	2	4345	5.5	236	1957 1956	1	5950 2740	5.3 5.7	31a 155	1	7570 8730	316 427	1	7456 7597	328 320
42886	4	7	4299	4.8	203	1957	2	4530	5.0	221	2	9530	401	2	6066	246

PENNSYL VANTA

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY OREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE	OAUGHTERS			TEST		FRESH	RECORUS	MILK		FAT	RECORDS	MILK	FAT	YLARLY HE	MILK	FAI
NO.	NO.	NO.	L8.	PLI.	L8.	YEAR	NO.	ISÉY	PCT.	LB.	NO.	LB.	L8.	NO.	L8.	Lű.
						1958 1959	3 2	5447 4420	4.6	248 207	3 2	9473 10045	405 377	3 2	10035	436 381
42931	8 18	29	7611	5.2	389	1953 1954	8 5	6886 8020	5.5	377 399 354	6 4 6	8373	398 388 376	2 4 4	8922 7390	412 356
						1955 1956 1957	6 2 1	7180 8120 5500	5.0 4.8 5.2	389 288	1	8420 9770 7540	46 I 35 I	1	829b 7499	36d 349
						1958 1959	5 2	9302 8935	4.9 5.0	460	3 2	9167 8400	431	3 2	8277 9091	364 438
42939	6 1	2	7495	5.4	403	1955 1957	1	8200 6 79 0	5.4 5.4	435 370	1	10470 8530	529 413	1	7706 8960	396 436
43 17 1	3 37	81	6896	5.1	349	1952 1953	4 16	8218 7265	5.3	434 372	16	8290 8303	423 401	4	8380	415
						1954 1955 1956	17 12 12	7629 7508 7374	5.2 5.0 5.1	393 377 373	17 12 12	8832 8925 9254	418 422 421	14 12 11	8465 8162 9292	402 389 440
						1957 1958	5	6464 6890	5.0	328 340	9	9068 8368	407 387	8	0035 8470	380 402
						1959 1960	2	5600 5590	4.8	267 275	2	6943 5795	319 25 7	3 2	7198 8056	339 361
43288	2 111	227	7638	4.7	359	1952 1953 1954	1 20 53	7270 7152 7952	4.7 4.7 4.8	343 331 380	1 20 51	8220 7841 7992	386 367 382	6 50	8504 7981	398 380
						1955 1956	42 31	8155 8520	4.7	383 401	42 31	8181 8661	395 413	40 30	8168 8664	370 411
						1957 1958 1959	29 21 23	8246 8070 8483	4.6 4.6	384 377 392	28 17 23	8697 8308. 8300	405 378 375	26 14 22	8382 8661 9243	395 403 418
43338	4 72	139	7965	4.9	389	1960 1953	7 2	7459 10160	4.4	335 471	7 2	7737 0985	372 477	7	8846	411 556
43330	4 12	13,	1703	4.7	307	1954 1955	15 31	8394 8274	5 • û 4 • 9	413 404	15 30	8581 8527	407 404	14 23	8089 8605	386 402
						1956 1957 1958	22 26 19	8046 7734 8443	4.9 5.0 4.9	390 382 417	21 25 16	8664 8739 8527	410 404 398	17 14 15	8620 0571 9156	402 397 427
						1959 1960	16 8	8496 6956	4.8	409 325	16	7947 8465	368 384	16	9234 9157	427 419
43393	0 1	1	8100	5.2	425	1959	1	8100	5.2	425	1	9340	410			
43467		1 30	3710 7400	4.9	151 357	1958 1953	1 2	3710 8015	4.1	15 I 383	2	8120 7460	373 349	1	8916	412
43728	2 13	30	7400	4.7	331	1954 1955	6	7447 8383	4.7	345 412	6	8742 8665	421 399	3	8299 8447	398 397
						1956 1957 1958	6 3 4	7863 7873 7248	4.9 4.7 4.5	პი I 370 330	6 3 3	8197 9030 7727	389 430 365	5 3 3	0049 8695 8560	393 420 410
1.7700			2347		200	1959	3	6873	5.3	357	2	7225	335	2	8977	431
43728	3 6	11	8153	4.8	388	1957 1958 1959	4 4 3	8150 8925 8407	4.8 4.7 4.7	309 415 394	4 4 3	3873 8643 8683	423 385 384	4 4 3	9486 9720 9043	433 443 396
43785	5 81	157	6877	4.7	325	1952 1953	2 10	6890 7511	4.8	320 352	2 8	9605 8838	406 381	5	9017	412
						1954 1955 1956	17 18 16	7247 7646 7504	4.8 4.8 4.8	347 366 360	17 18 16	9425 9619 9195	402 430 416	16 13 14	8959 9672 8642	3d8 42 7 411
						1957 1958 1959	26 35 26	6721 7321 7132	4.6 4.8 4.7	311 353 331	26 31 26	8815 8818 9478	380 381 395	22 30 25	6994 9994 9652	336 429 410
. 7070						1960	7	7149	4.7	331	7	7747	348	7	8831	406
43832 43908		2 50	7340	5.0	577 352	1958 1953	2	8150	5.0 4.6	577 375	1	10250	542 497	'	9145	486
						1954 1955	10	8045 7 422	5.0	398 3 7 2	4 10	9708 8 7 08	438 418	3 8	10475 8979	454 425
						1956 1957 1958	6 11 8	7583 7205 8020	4.9	362 349 3 7 8	6 11 6	8748 8125 7985	423 387 361	4 5 5	9488 6943 8362	432 345 383
						1959 1960	6	8142 6545	4.6	377 299	6	8760 8700	390 399	5 4	92 3 3 8944	411
43990	5 75	145	7495	4.4	329	1953 1954	6 19	7325 811o	4.5	319 366	6	9782 9869	403 415	4 17	9924 8952	417 386
						1955 1956 1957	20 15 27	7683 7696 7821		343 339 341	20 15 27	9839 8677 9334	425 389 390	18 15 22	9167 8889 8583	399 390 373
						1958 1959	30 22	6966 7798	4.4	303 340	28 22	8782 9360	373 390	26 21	9412 9646	399 406
						1960	6	5305	4.2	225	6	6338	251	6	9857	415

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPLO BY BREED,

8Y YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY SI	RE		R	ECORO AVE	RAGE	BY SIR	E BY	FRESHENING	YEAR				
SIRE D	NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.	L8.	TEST PCT.		SOS-DAY (RECURDS ND.	MILK		YEARLY HE RECORDS NO.	MILK	
440675	113	153	7848	1. I.	71.7	1067	JUERN									
440013	113	153	1040	4.4	346	1957 1958 1959 1960	2 38 85 28	7865 8133 7736	4.4 4.5 4.4 4.5	433 352 354 344	2 38 85 26	8755 8692 8940 8547	394 384 388 373	34 80 27	9213 9446 9591	406 412 424
440747	199	361	7958	4.8	382	1953 1954 1955 1956 1957 1958 1959 1960	22 42 53 32 36 56 91 29	8163 8385 8698 8233 8049 8099 7881 7768		391 407 432 413 388 389 373 364	22 41 51 32 34 51 91 28	8221 8619 8991 8912 8920 8691 8863 9170	387 405 418 422 419 399 390 400	5 41 48 30 34 45 85	9106 8641 8611 9190 8838 8856 9544 9852	459 410 408 442 417 411 428 441
443312	81	169	7525	4.8	359	1952 1953 1954 1955 1956 1957 1958 1959 1960	1 17 29 40 21 17 24 14	7500 7310 7400 7538 7030 8420 8792 9016 9278	4.7 4.8 4.8 4.7	363 341 354 363 332 396 415 412 428	1 15 27 39 21 17 20 13 6	8700 8115 8338 8777 8610 8852 8540 8360 8090	404 375 411 423 419 432 409 398 385	4 24 37 19 16 17 14 6	8350 7932 8612 8512 8508 8859 8847 8395	3d9 416 414 422 432
4444 17	5	8	7676	4.9	37 >	1956 1957 1958 1959	2 1 3 2	7755 5620 8453 7405	4.6 5.6 4.9 5.1	358 314 415 372	2 1 3 2	8750 8920 7950 8740	393 435 398 407	2 1 3 2	9385 9276 8531 9107	435 450 420 430
կ սկես 18	73	138	7652	4.6	354	1953 1954 1955 1956 1957 1958 1959	2 13 29 26 24 27 13	6875 8220 8031 7878 7881 8057 8690 9613	4.7 4.6 4.5 4.5	296 382 373 360 358 363 395 453	1 12 29 25 24 16 13	6940 7903 8633 8604 8561 8738 8935 9325	396 410 393	12 26 22 19 14 12	7876 8647 8761 8160 9161 10086 9595	
445925	48	99	7248	5.0	360	1953 1954 1955 1956 1957 1958 1959 1960	7 18 22 13 9 16 11 3	6283 7062 7009 7422 7897 8422 8251 8957		324 353 354 368 399 426 404 422	7 18 22 13 9 15	8034 8497 8492 9071 9710 9321 8674 11007	380 399 397 418 429 422 402 484	1 17 22 12 7 13 11	7041 8263 8406 8915 10139 9914 9449	338 388 397 432 470 453 443 512
446105	3	3	5100	4.3	221	1959 1960	1 2	4600 5350		200 231	1 2	9000 9845	407 413	1 2	9418 11544	422 460
446627	1	3	7557	5.6	42 2	1957 1959 1960	1 1 1	7550 8120 7000	5.2	485 422 358	1 1 1	9240 7560 7710	431 357 384	1 1 1	8491 8676 8426	423 415 410
447029	27	61	7160	4.7	334	1953 1954 1955 1956 1957 1958 1959	6 14 9 6 9 8 6 3	7445 7070 6926 6300 7129 7823 7863 7857	4.6	344 326 326 305 333 356 362 362	5 13 8 6 9 7 6 3	8678 8695 8296 8008 8408 8361 8162 7677	386 386 396 384 383 395 382 343	1 12 7 6 7 7 4 3	8273 8641 8156 7719 8270 8972 8802 8186	
447754	19	31	7369	5•2	378	1954 1955 1956 1957 1958 1959	9 10 4 3 3 1	7433	4.5	399 386 341 350 341 455 330	9 9 4 3 2 1	8434 7940 8838 8850 10140 13200 11850	379 399 428	8 10 4 3 2 1	8558 8000 8914 8469 9058 11271 12753	384 401 407 381 423
448640	3	6	8946	4.8	433	1955 1956 1957 1958 1959	1 1 1 2	8470 9360 11530 4980 12070	5.1 4.7 4.7	467 482 543 236 566	1 1 1 1	8190 8610 9090 5810 9930		1 1 1	8753 8840 8589 8862	435 420
449674	89	185	7478	4.9	362	1953 1954 1955 1956 1957 1958 1959	5 30 34 23 23 30 35	7714 7775 7539 7448 7804 7865 8288 7267	4.9 5.1 5.0 4.9 4.9	395 378 383 370 382 385 391 361	5 28 33 21 23 27 33 7	7910 8360 8551 7537 8580 8816 8295 8566	392 405 358 401	1 23 29 20 15 25 31	8208 8318 8769 7902 7714 9316 9012 9687	389 408 376 376 432 418
451358	42	107	8468	4.6	384	1953 1954 1955 1956 1957 1958	6 16 23 12 16	8752 8625 8506 8698 9528 9148	4.6 4.5 4.6	393 391 389 389 436 427	6 15 23 12 16	8153 8697 8851 8384 8911 9281	397 415 386 409	14 21 12 14 14	9444 8681 8468 7680 9247	406 398 394

PENNSYL VANIA 342

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

OAUGHTER AVERAGE 8Y SIRL

	JACOINER	AVERAGE	J. J.			, ,	LCORU AV		317	2 01	I KE SHENTING					
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-UAY (RECORDS NO.	MILK		YEARLY HI RECUROS NO.		
						1959 1960	GUERI 15 3	8615 7427	4.5 4.1	387 304	15 3	7862 7300	356 326	15 3	8862 8683	417 400
45207	5 1	1	2640	4.7	125	1960	1	2640	4.7	125	1	7880	329	1	12306	462
45234	0 1	1	7850	4.6	358	1959	1	7850	4.6	358	1	7360	341			
45243	8 1	3	8717	4.7	408	1957 1958 1960	1	9780 8860 7510	4.9 4.6 4.5	480 405 339						
45290	5 15	29	7529	4.7	356	1955 1956 1957 1958 1959	3 2 9 7 7	9050 7450 7526 7616 7493	4.7 4.9 4.7 4.8 4.7	427 362 351 371 357	3 2 9 6 7	8953 9435 9016 9220 8784	409 443 400 405 379	3 2 8 6	9628 7925 7580 10021 9829	449 396 352 434 443
45321	0 1	1	7410	5.0	371	1960 1960	1	9120 7410	4.7 5.0	433 371	1	7240	369 455	1	9036	424
45422		30	7144	5.0	354	1954	3	7577	5.1	380	3	9630	470	2	9162	436
						1955 1956 1957 1958 1959	9 6 6 5	7538 6782 7977 7198 9080	5.0 5.0 5.0 5.0 4.7	376 343 401 362 429	9 5 6 4 1	8611 8432 8707 7598 8300	405 396 425 363 389	9 4 5 4 1	9092 9107 8750 9718 9134	430 442 424 471 436
45422	ц 39	82	7035	4.8	336	1954 1955 1956 1957 1958 1959	2 12 15 15 19 13 6	8520 7087 7361 7667 7229 7833 5792	5.1 4.8 4.7 4.8 4.6 4.7	433 338 347 371 335 368 255	2 12 14 15 15 13	10370 8438 8166 8363 8465 7924 6976	463 382 378 384 388 361 320	2 10 9 9 13 12 6	9728 8698 8442 8864 8553 8616 9885	450 374 389 413 402 401 443
45448	3 22	48	7418	4.5	332	1954 1955 1956 1957 1958 1959	2 7 3 7 11 14 4	7195 6830 7670 6899 7446 8574 8263	4.8 4.6 4.9 4.8 4.4 4.5	337 314 369 323 322 369 363	2 7 3 7 10 14 4	9020 8621 8973 8310 8368 8784 9218	436 417 424 390 371 373 398	1 4 2 4 9 14 4	7935 8161 8265 7718 8905 9500 9399	371 388 395 345 398 406 417
45753	4 95	168	7021	4.9	342	1954 1955 1956 1957 1958 1959	34 52 27 23 20 7 5	7418 7075 7201 6829 7258 8076 7150	5.0 4.9 5.0 4.8 4.7 4.7	372 348 355 327 355 379 330	34 50 24 22 16 7 5	8664 8629 8326 8207 8983 9400 8624	408 403 392 371 405 408 388	28 42 24 20 15 7 5	8543 8335 8789 7873 9071 10223 9350	408 398 423 369 407 450 426
45754	4 5	8	7273	4.7	348	1957 1958 1959 1960	1 3 3 1	5960 6913 6350 11120	5.0 4.6 4.9 4.7	30 1 329 335 524	1 3 3 1	7110 9253 10130 8400	318 415 426 401	1 3 3 1	6507 10224 10397 9363	326 462 463 443
45946	8 27	65	8071	5.0	404	1954 1955 1956 1957 1958 1959	11 13 11 11 10 4 5	7315 8311 7912 8598 8533 6918 8202	5.0 5.1	384 409 392 440 423 345 390	10 13 11 11 9 4 5	8485 8689 8637 9260 8562 7620 8076	394 400 411 439 401 358 382	10 11 11 8 9 4	8166 8920 9093 8166 8802 8892 9622	377 411 432 394 415 415
45948	9 70	144	8064	4.8	391	1954 1955 1956 1957 1958 1959	8 25 27 24 29 25 6	8193	4.9 4.9 4.9 4.8 4.7	401 400 393 375 395 395 487	8 25 27 22 22 25 6	8454 8375 8265 8566 7954 8042 8960	393 396 383 395 373 363 412	6 21 27 19 21 25 6	8522 8562 8519 8779 8240 9063 9494	
46175	6	13	7476	5.0	371	1954 1955 1956 1957 1958 1959	2 4 3 1 2	7400 8085 8180 5000 7180 4430	4.9 4.9 4.9	367 393 407 247 354 215	2 3 2 1 1	8025 8963 8350 7440 8170 6980	379 431 387 367 389 327	2 2 1	7723 8638 7903 9363 8764	367 426 354 438 407
46175	.4 2	8	8969	4.8	423	1956 1957 1958 1959 1960	1 2 2 2 1	8400 9065 9070 8885 9310	4.7	435 430 439 409 388	1 2 2 2	8160 9075 9605 8935 9140	355 394 429 406 429	1 2 2 2 1	9167 9740 8638 9642 9014	474 430 397 436 425
46200	8 68	118	6930	4.6	321	1954 1955 1956 1957 1958 1959	6 17 17 24 28 20 6	6947 6784 7614 6890 7544 8168 8568	4.8 4.5 4.6 4.6	324 322 357 318 349 375 376	6 17 17 24 28 20 6	8470 8749 8548 9152 8976 8501 8643	390 412 401 410 404 381 414	5 16 17 22 27 20 6	9114	399 402 420 368 411 424 445
46258	39 26	53	8108	5.0	405	1954 1955 1956	3 7	7563 8578 8104	5 - 1	379 437 415	3 9 7	8240 8866 9071	413 429 400	3 9 5	8357 9016 9047	422 434 416

4.9 364

4.9

8900 365

9460 429

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

PENNSYL VANIA 344

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY DREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	ONO STITLE	A. C. NAGE	5. 51.								700			W. 10:		
SIRE ND.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECURUS NO.	L8.	TEST PCT.	FAT LB.	305-DAY (RECORDS NO.	MILK		YEARLY HI RECORDS NO.		
482386	5 12	24	6767	5.1	343	1955 1956 1957 1958 1959 1960	5 4 8 4 4	5543 7725 6958 6845 7710 7820	5.0 5.0 5.3 5.2 5.2 5.0	277 379 364 354 388 394	3 4 8 4 4	10703 8703 9161 8115 8713 8030	455 390 390 354 356 374	3 4 8 4 3	9280 8388 8570 11129 9381 8186	386 411 396 455 387 376
483668	3 46	88	6866	4.8	331	1955 1956 1957 1958 1959	6 10 19 30 23	9195 8179 7050 6246 7320	5.2 5.0 4.8 4.8 4.7	482 412 339 297 348	6 10 19 30 23	10132 10474 3168 0302 8221	492 492 383 370 353	6 10 19 30 23	10328 9377 8286 8279 9118	487 448 394 374 405
4855 17	7 47	81	6966	4.7	321	1955 1956 1957 1958 1959 1960	2 10 24 29 11 5	8155 7374 7333 6438 7035 7402	5.0 4.7 4.6 4.6 4.6	410 348 334 292 314 338	2 10 23 29 11	7020 7596 8743 9133 9242 6230	359 366 384 393 389 273	1 9 23 26 11 5	8676 8376 8555 9104 9874 8805	452 391 395 400 430 405
488743	3 1	1	11200	5.2	582	1958	1	11200	5.2	582						
490658	3 65	109	6829	4.5	309	1956 1957 1958 1959 1960	9 22 33 38 7	6857 5973 7036 7506 9009	4.6 4.5 4.7 4.5 4.5	312 275 327 340 400	9 22 33 38 7	8560 8600 9087 8741 10599	394 382 401 385 428	9 20 31 36 6	8852 6534 9158 9327 10517	423 301 400 415 440
491923	3 9	21	6770	5.1	338	1956 1957 1958 1959 1960	3 2 8 6 2	6587 10070 6811 6243 10280	4.9 5.5 5.1 5.2 4.0	324 548 343 318 406	5 2 8 6 2	8933 9820 8241 8340 10415	403 484 385 378 433	3 2 8 6 2	7401 10977 9124 8559 10246	340 597 422 410 459
493849	9 43	81	7400	4.6	331	1956 1957 1958 1959 1960	5 17 23 27 9	7472 7271 7322 7541 8021	4.5 4.7 4.6 4.6 4.5	333 339 339 348 362	5 17 23 27	8900 8456 8568 8726 9046	404 383 382 379 376	5 15 22 24 9	9080 8365 8674 9774 9673	409 386 385 426 414
4 9 4891	7 36	64	7454	4.6	346	1956 1957 1958 1959 1960	1 15 19 22 7	6070 7987 7302 7908 6780	4.8 4.0 4.7 4.7 4.6	292 373 346 367 316	1 15 19 22 7	7530 8701 8586 9234 8693	374 372 377 390 380	1 15 18 17 7	7903 8968 8982 9421 9155	387 392 383 412 394
495451	4 6	6	7767	4.8	370	1959	6	7767	4.8	3 7 0	6	7988	344	6	9369	403
497766	5 3	ų	5467	4.6	253	1958 1959 1960	1 2 1	3290 6520 7020	4.1 4.5 4.5	135 311 319	1 2 1	6840 10305 11170	300 418 413	1 1 1	7586 8448 11718	329 383 437
49994	5 15	28	6415	5.1	323	1956 1957 1958 1959 1960	3 7 6 9 3	7053 6507 4440 7412 6707	5.2 5.1 5.1 4.9 5.0	367 337 225 359 335	3 7 6 9 3	9490 8530 8340 7370 8053	470 387 357 346 382	3 6 5 7 3	7776 8193 8652 7317 8960	405 373 389 346 429
50 177	7 2	3	7855	4.7	363	1958 1959 1960	1 1 1	6450 9580 5810	4 • 4 4 • 7 4 • 7	283 447 2 7 5	1 1 1	3670 10540 7710	360 415 312	1	9385 11358 8197	380 457 343
502631	4 8	9	7185	4.6	330	1959 1960	6 3	7897 5513	4.6 4.3	369 234	6 3	7265 6567	317 276	5	8731 9915	409 415
50427	5 23	38	7010	4.9	342	1957 1958 1959 1960	10 15 9	1621	5.0 5.0 4.8 4.7	360 320 368 340	4 10 15 8	9643 8544 9091 8014		4 8 15 9	8649 10590 10126 11378	
50 54 7	2 26	42	73 38	4.7	346	1957 1958 1959 1960	3 16 22 1	7480 7728 7137 6770	4.7	348 368 334 307	3 16 21 1	9520 8970 9071 9070	3/3 369 369 423	3 16 18 1	9792 9647 9465 9875	395 410 399 455
50930	5 15	20	7133	4.8	344	1958 1959 1960	10 3	7307 6884 7917		353 334 303	7 10 3	8933 8794 8063	387 382 384	7 10 3	93 / 9 9104 8295	418 413 403
50977	5 ì	2	5185	5.1	261	1958 1959	1	7440 2930	4.9 5.3	367 155	1	7510 6690	358 315	1	6627 7979	318 388
51028	9 2	2	7 205	4.6	331	1959 1960	1 1	7040 7370	4.5 4.0	319 342	1	8820 11350	361 446	1	10519 11292	403 432
51097	5 13	17	8293	4.5	370	1958 1959 1960	2 9 6	8280 8293 794 3	4.6	371 379 344	2 9 6	9660 9439 10032	444 375 385	2 9 6	9445 9943 10240	425 411 419
51 164	0 42	56	6481	4.7	306	1957 1958 1959 1960	1 14 34 7	4440 6686 6618 5817	4.8 4.8	183 323 314 288	1 14 34 5	8250 8453 9039 8136	373	1 14 30 7	8131 8559 9593 9371	339 375 410 465
51266	0 40	52	7928	4.8	3 7 8	1958	12	8369	4.9	408	12	9023	409	12	9393	424

526027 3 3 6743 5.2 356

TABLE 15.--OAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y 51	RE		R	ECORD AVE	RAGE	BY SIR	E BY	FRESHENING	YEAR				
											305-DAY (YEARLY H		KAGE
SIRE	DAUGHTERS			TEST		FRESH	RECOROS		TEST		RECURUS		FAT	RLCOROS		
NO.	NO.	NO.	LB.	PCT.	L8.	YEAR	NO.	L8.	PCT.	LB.	NO.	FR.	L8.	NO.	L8.	LB.
							GULRI	ISEY								
						1959	33	7813	4.8	370	33	8625	382	29	9589	425
						1960	7	8537	4.8	40B	7	8706	382	7	8946	402
51302	2 5	7	7979	4.8	376	1958	2	7095	5.0	350	2	9575	420	2	9865	435
						1959	4	7900	4.1	368	4	9703	428	3	10217	479
						1960	1	9700	5 · 1	490	1	10600	485	1	11870	504
51550	1 26	26	8251	4.6	377	1959	20	7917	4.7	367	20	8390	376	19	9283	414
						1960	6	9363	4.5	413	6	8710	392	5	9655	436
5 1553	5 1	1	6630	5.3	352	1959	1	6630	5.3	352	1	5930	319	1	7281	371
51938.	3 4	5	6968	4.9	352	1958	1	9960	4.8	481	1	13720	492	1	13636	530
						1959	2	7705	5.4	407	2	8025	364	1	9701	423
						1960	2	5815	4.7	300	2	7160	304	2	9674	423
51938	ک 4	3	72/0	5.5	404	1959	2	7695	5.9	455	2	7935	393	1	9341	460
						1960	1	6420	4.7	303	1	8690	366	1	9897	604
52026	6 3	3	6887	4.9	332	1959	i	10090	4.8	489	1	8500	404	1	9091	438
						1960	2	5285	4.9	254	2	8125	366	2	7859	366
52 11 52	2 1	1	7520	5.0	372	1959	1	7520	5.0	372	1	9480	455	1	8731	416
52147	0 2	2	6955	4.2	288	1959	2	6955	4.2	288	2	9465	405	2	9816	430
522530	0 3	3	5350	5.2	282	1959	2	5875	5.1	302	2	7630	371	1	9341	460
						1960	ī	4300		241				i	9178	451
52442	7 4	łą.	5075	4.8	245	1959	1	7950	5.3	418	1	10650	371	1	11216	403
						1960	3	4117	4.6	187	2	7175	. 311	3	11489	483
52539	6 1	1	3870	4.6	178	1960	1	3870	4.6	178	1	11580	412	1	10126	439

1960 3 6743 5.2 356 3 7450 344 3 9843 434

PENNSYL VANIA 5

TABLE 15.--DAUGHTER-AVERAVE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.	LB.	TEST PCI.	FAT LB.	305-DAY (RECORDS NO.			YEARLY HE KECORDS NO.		
56 17 89	8	32	11544	3.8	423	1947 1948 1949 1950 1951 1952 1953 1954 1955	4 6 5 4 3 3 1 2 3	11183 11508 12296 13510 12293 13517 15050 14520 11423 13220	3.6 3.8 3.7 3.5 3.7 3.6 3.4 3.5 3.3	404 426 446 474 451 481 513 504 375 419	1 1 2 1 2 3 1 2 3	12920 12190 12980 14260 12825 12273 13720 12975 12600 14070	530 435 441 510 462 450 479 463 462 489	2 3 1	1244B 12023 14835	442 429 519
620987	1	ų	11930	3.5	417	1947 1948 1949	2 1 1	10410 13460 13440	3.5 3.5 3.5	363 466 475						
654594	3	5	10017	3.7	364	1947	5	9810	3.1	359						
666928	5	13	11143	3.5	385	1947 1948 1949 1950 1951 1952	1 3 4 2 1 1	10080 10963 10945 13065 14880 14100 16470	3.6 3.5 3.4 3.2 3.2 3.3	362 386 365 422 483 463 541	;	12900 12100	468 434	1	11718	4 24
669721	1	1	7170	3.6	257	1950	1	7170	3.6	257						
673095) 44 44	147	12484	3.5	436	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	13 13 16 19 18 20 15 11 9 5 3 3	11838 11326 13424 13084 11907 12430 13249 12984 14050 14170 13233 12083 10795	3.6 3.5 3.6 3.4 3.5 3.4 3.5 3.4 3.5 3.7	427 400 464 466 404 430 451 447 485 480 470 385 393	8 9 10 11 15 14 10 9 5 3 3	10261 11588 12291 11815 12539 12550 11777 12432 12184 11153 11490 10925	387 413 440 422 437 447 421 452 443 409 433 410	1 9 8 4 2 3 2	10911 12018 11932 12941 10284 12466 11053	334 435 438 472 309 461 408
675043	3	8	14111	3.4	482	1950 1951 1952 1953 1954	2 2 1 2	14820 14400 13360 12585 10030	3.5 3.7 3.2 3.1 3.1	512 527 431 388 312	1 1 2	11580 12370 13025 13090	403 405 443 456	1	13080	455
676723	3 1	3	9543	3.8	356	1947 1948 1953	1 1 1	8890 7420 12320	4.2 3.6 3.5	370 267 430	1	6820	309			
680074	3	7	12721	3.3	417	1948 1949 1950 1951 1952	2 2 1 1	12760 12645 11180 14040 11550	3.2 3.5 3.7 3.5 3.4	409 435 418 487 396						
682048	3 1	1	13200	3.6	481	1954	1	13200	3.6	481	1	11040	387	1	10889	377
682072	2 141	452	10648	3.7	389	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	38 45 50 59 53 65 49 34 27 10 11 8 3	11212 10349 11027 10957 10824 11942 11376 111849 12438 10391 11494 11777	3.7 3.6 3.6 3.7 3.7 3.7 3.6	404 382 399 404 437 418 395 426 431 359 371 407	4 6 11 17 20 32 41 33 22 9 9	10990 12655 11595 12073 11938 12215 11379 11105 11780 11934 11329 12065 11300	426 429 403 421 431 438 411 402 431 428 425 429		10705 11406 11026 11400 11125 13850 11852	
693386	1	2	11025	3.8	421	1948 1949	1	10960 11090	3.7 3.9	405 437						
695644	s 41	104	11438	3.6	407	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	17 20 20 11 8 6 7 5 4 2 2	11675 10430 12230 10584 12109 11180 11684 12662 13383 13620 14475 14730 13970	3.6 3.5 3.5 3.6 3.6 3.6 3.6 3.6 3.6 3.5 3.6 3.6 3.6	416 373 435 377 431 397 427 456 461 463 487 440	1 2 2 2 2 6 5 3 2 2 2	14340 12030 12330 11580 13583 11056 11827 11055 12385 13100 12940	472 437 442 423 519 402 424 421 462 494 469	1 5 4 2 2 1	11489 11742 11325 11167 12628 11968 13135	412 426 420 406 471 425 487
698483	3 64	206	11827	3.4	402	1947 1948 1949	14 25 31	10135 10412 12347	3.4 3.4 3.4	344 352 421	2 4 11	8200 11158 11698	308 405 424			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	GAUGHTER	AVERAGE	8Y S1	RE		R	ECORD AV	ERAGE E	Y SIR	E BY	FRESHENING	YEAK				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY (RECORDS NO.			YEARLY H		
						1950 1951 1952 1953 1954 1955 1956 1957 1958	HOLS 30 27 27 22 13 6 5	TEIN 12523 12854 13294 12732 11542 11558 13112 16143 13165	3.5 3.4 3.4 3.4 3.4 3.4 3.7	439 437 455 430 391 399 449 535 482	14 19 19 21 13 6 5 4 2	12097 12533 12624 11891 11224 11490 12612 12258 11540	436 450 453 428 403 406 452 439 423	1,3 6 5 4,2	11911 11679 10549 11694 10608 12960	462 422 387 436 382 458
698505	142	375	11401	3.5	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 57 86 66 45 38 29 14 13 7 6 3 1	11351 10940 12073 11662 11634 12583 11931 12192 12442 11167 13393 8567 14590 9650	3.4 3.5 3.6 3.5 3.6 3.5 3.6 3.5 3.5 3.5 3.5 3.5 3.5	380 380 427 412 413 444 423 438 434 412 460 290 487 336	8 14 16 14 25 14 13 7 6 3	12081 12924 12343 12141 11785 11221 11164 10934 11753 11718 12540 11990 12260	459 456 445 430 416 429 423 447 456 449 480	7 12 13 7 3 2	11201 10804 11035 11075 11503 12028 12361 12164	414 403 421 426 448 474 497 486
698848	51	117	10547	3.7	387	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	17 32 24 21 10 4 5 2	10935 10230 10254 10770 11349 11505 11020 14415 11700 13810	3.7 3.6 3.6 3.4 3.5 3.6 3.9 4.3	405 362 370 390 389 406 399 562 499 576	7 19 22 20 10 4 5 2	12160 11561 11196 11002 11340 11715 11708 12560 14070 15120	469 430 416 412 424 421 431 476 553 592	19 10 4 5 2 1	10320 11543 11101 11377 11164 12137 13178 14955	384 431 412 422 413 450 510
70 1962	6	22	11356	3.6	406	1947 1948 1949 1950 1951 1952 1954 1955	1 1 3 3 4 3 4 2 1	10470 10420 10600 11697 11588 11667 11938 12050 9280	3.6 3.2 3.4 3.6 3.0 3.4 3.3 3.3	378 335 359 424 422 393 395 397 321	1 1 2 3 4 2	11160 10090 10615 11027 10343 11395 11500	372 352 385 404 386 444 433	4. 2 1	9178 11140 11772	328 418 453
704747	190	613	11529	3.5	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	8 37 77 113 97 87 70 49 33 17 14 7	10904 11522 11623 11431 11581 12190 12148 12687 13201 12663 13918 10596 14870 4510	3.6 3.5 3.5 3.6 3.5 3.6 3.6 3.6 3.6 3.6 3.6	386 409 412 404 412 428 431 455 470 449 493 381 522 176	10 23 45 49 52 59 45 30 14 12 4	11914 12265 12254 11383 12395 12117 12176 11933 11226 12510 10625 12037	429 442 442 429 448 441 444 443 410 464 402 427	13 43 25 13 10 4 3	11255 11947 12177 12322 12114 12462 12797	399 435 441 445 446 470 469 482
706640	31	86	10306	3.7	374	1948 1949 1950 1951 1952 1953 1954 1955 1956	20 16 16 15 8 5 2 2 1	9944 10146 9916 10073 10098 11510 8370 10825 9570 9840	3.7 3.8 3.7 3.6 3.5 3.8 3.6 3.4 3.4	366 382 363 364 357 439 302 364 324 340	4 4 4 2 2 1	12730 9455 10203 11835 11308 10510 10435 9600 11940 11790	444 360 379 430 418 387 383 344 430 427		11979 10835 9260 9472 9788	40 I 348 346
7085∠6	1	5	12414	3.6	448	1950 1951 1954 1955 1957	1 1 1 1	12410 11790 12520 12830 12520	3.5 3.5 3.8 3.5 3.7	439 408 472 455 464		12150 13590 11840 11850 9270	426 465 402 405 352	;	9766 10791	365 404
712337	5	5	9118	4.5	40á	1951 1952 1956 1957	1 1 2 1	8680 9300 10370 6870	4.6 4.7 4.2 4.9	398 435 430 334	2 1	10025 9690	435 422	1	9832	419
713429	1	2	10650	3.4	352	1950 1955	i 1	11570 9730	3.2 3.5	367 337	1	8260	295	1	8415	328
715512	1	6	13978	3.8	532	1947 1949 1951	1 1 1	15180 13110 16620	4.0 3.7 3.8	613 489 627	1	11180 14170	400 549			

PENNSYL VANTA 348

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DADCHTER AVERAGE BY STRE

SIKE NO.	OAUGHTERS R	ECORDS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-DAY (RECORDS ND.			YEARLY HE RECORDS NO.		FAT
						1952 1954 1955	HOLS	TEIN 10830 16370 11760	3.9 3.8 3.6	420 618 424	1 1 1	12670 14040 12320	487 541 474	1	12328 13919	463 542
717420) 1	2	7645	3.4	259	1950 1951	1	8070 7220	3.5 3.3	279 238						
718393	3 1	1	8360	3.6	305	1947	1	8360	3.6	305						
724430) 19	90	11338	3.8	426	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5 14 16 13 12 7 8 3 5 5 3	9964 11091 10652 11220 12758 12260 14876 16300 14596 14310 13757 14220	3.9 3.8 3.8 3.7 3.7 3.7 3.6 3.6 3.6 3.5	389 432 401 432 472 451 547 615 524 516 480 456	5 7 6 9 6 7 3 4 3 3	14738 12711 11547 11633 11087 12220 13060 12380 12380 14090	525 441 419 423 398 420 460 442 452 511	5 7 3 4 3 3	11164 11573 13538 12710 12110 13051 16415	412 405 487 455 446 482 600
725502	2 2	10	12003	3.6	433	1947 1948 1949 1950 1951 1952 1953 1954	1 1 1 2 2 1	10660 12320 12400 11750 11755 12045 12700 14370	3.7 3.4 3.7 3.6 3.7 3.6 3.6 3.6	393 417 461 418 425 441 454 515	1 1 1	13550 13070 13420 13750	483 464 490 497	1	12644	473
727219	2 10	31	11116	3.5	387	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	44 3 2 5 2 2 1 1	10805 11470 10515 10480 12160 11254 14295 15210 12310 11500 8070	3.3 3.4 3.4 3.1 3.6 3.3 3.6 3.8 3.8	351 391 359 355 375 406 479 540 472 435 285	1 1 2 2 4 2 2 1 1	1 1580 11700 11655 10960 10528 12455 11420 11950 10940 10560	411 392 388 356 397 491 443 496 425 405	1 2 1 1	9472 11696 11183 10562 10878	322 471 463 449 437
727609	3	9	12823	3.6	467	1948 1949 1950 1951 1952 1953	2 3 1 1 1	10890 12697 16900 17650 20470 18370	3.3 3.6 3.2 3.6 3.8 3.4	363 460 539 644 772 621	1 1 1 1	12400 10800 10730 9330 15690 14870	465 398 387 335 607 573			
72815	1 20	85	11913	3.7	436	1947 1948 1949 1950 1951 1952 1953 1954 1955 1957 1958 1959	14 15 16 13 10 5 1 2 2 2	12723 12039 11966 12881 11732 12994 12466 18710 13560 11540 17040 10860	3.6 3.7 3.7 3.7 3.7 3.7 3.6 3.5 3.8 3.2 3.3	453 441 4479 431 476 459 669 471 431 548 362	1 2 3 2 3 2 4 1 2 2 1	13300 12985 12587 13100 11823 13435 12318 13000 13660 11080 13700 12580	501 478 485 495 459 494 473 466 511 419 516 478	2 1 2 2 1	9309 14715 14039 11276 13167 13592	378 555 541 420 489 504
724030) 1	7	14887	3.2	478	1948 1950 1951 1952 1953 1954	1 1 1 1 1 2	16150 15540 16020 18150 12870 12740	3.5 3.4 3.1 3.0 3.1 3.2	558 534 490 546 400 411	1 1 1 1 1 2	12980 13940 15180 16810 14830 12225	445 504 506 546 454 405			
73313	1 1	1	7080	3.4	240	1952	1	7080	3.4	240						
733976	6 121	309	11341	3.5	395	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	14 35 36 50 54 39 33 19 12 6 7	12288 11686 11387 12036 11449 11675 12199 12112 12005 11063 10949 10350 12480	3.5 3.4 3.5 3.6 3.5 3.5 3.5 3.5 3.5 3.5 4.1	429 401 402 429 407 403 430 424 414 368 372 361	2 6 11 28 32 36 33 19 12 6 7	13750 12605 11980 12092 12201 11512 11650 12413 12317 10932 11151 11233 12010	518 437 418 438 445 418 427 456 448 391 416 419	9 29 18 10 6 6 3	10836 11456 11668 12281 10895 11672 11427 13004	396 421 432 460 401 436 420 519
73436	2 126	356	10938	3.7	401	1948 1949 1950 1951 1952 1953 1954 1955 1956	6 30 55 67 63 49 31 26 10	10193 10942 11363 11699 11058 11254 10482 12955 11288 12198	3.7 3.8 3.7 3.7 3.6 3.7 3.7 3.6 3.5	371 410 418 429 400 416 388 476 411	8 15 30 39 45 30 25 8	12016 12537 12172 11389 11170 11048 11710 11985 11600	441 460 450 425 415 419 435 447	14 29 25 8 8	10794 11323 11500 12110 12522	412 423 424 454 467

TABLE 15.---OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	BY YEAR DAUGHTER				IRDS FR		STATE ON				FRESHENING	YEAR				
SIKE ND.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY RECORDS ND+			YEARLY H RECOROS NO.		
						1958 1959 1960	HOLS 5 3 1	TEIN 12730 13183 6470	3.5 3.7 3.3	453 478 216		13773 11747	506 431	4 3 1	13592 13258 13276	504 493 482
73535	1 605	1770	11219	3.6	401	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	55 201 262 256 267 222 176 122 65 57 50 26	12003 10364 111129 11110 11474 11672 11767 12858 13073 12864 12596 12671 11339	3.5 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	423 375 400 402 410 418 419 427 458 469 459 454 442	9 46 88 121 169 207 171 116 62 54 40 26	11233 11988 12015 11617 11540 11165 11274 12007 11958 12219 12012 12348 12725	406 437 440 430 431 421 448 443 451 460 480	63 158 109 59 48 41 22	11377 11169 11544 12405 12127 12405 13049 13256	421 415 429 463 457 464 485 508
73547	6 206	609	12440	3.5	437	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	27 70 92 85 89 79 73 39 20 15 13 6	12768 12940 12397 12215 12493 12623 12674 13585 13401 12319 12182 13437 13400	3.5 3.5 3.6 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	440 458 438 433 436 443 478 465 415 425 469	4 18 52 42 58 66 69 37 18 14 9	10628 11728 11963 10966 11489 11191 11154 11562 11837 11159 10929 11245 11070	376 438 433 402 420 408 411 423 446 420 400 421 369	23 60 32 16 12 8 5	11267 11016 10966 12192 11637 10653 11768 10846	416 407 402 453 434 388 432 362
73791	5 1	4	11508	3.8	438	1950 1955 1957 1958	1 1 1	4390 13990 13890 13760	4.0 3.8 3.8 3.7	176 526 534 514	1 1 1	14870 15380 10640 11020	496 507 422 405	1	12535	467 393
c8851	1 2	17	11755	3.6	424	1947 1948 1949 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 1 1 1 2 2 2 2 2 1 2	11520 13130 10850 14110 13680 12825 12290 13965 13665 13030 8860 6795	3.7 3.8 4.1 3.9 3.6 3.2 3.5 3.6 3.7 3.1	423 486 415 581 527 463 394 495 500 489 275 254	1 1 1 1 1 1 1	1371D 11720 13420 13860 11620 11600 11390 13090 12950	489 435 499 520 446 439 426 538 500	1 1 1	12895 12415 12470 12306	498 468 469 477
73979	7 1	2	9500	3.7	344	1948 1949	1	8920 10080	3.8 3.5	336 352						
74131	B 1295	3824	11694	3.8	437	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	110 103 175 258 376 494 614 548 378 247 195 159 138	12386 12190 12461 11707 11958 11965 11655 12387 12379 11977 12482 12442 12256	3.8 3.8 3.8 3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.6	467 459 468 441 447 451 433 435 458 458 460 452 438	9 19 46 87 196 354 575 530 366 238 190 139	12589 12493 12603 11295 11849 11747 11490 11846 11648 11447 11473 12099	431 426 453 420 444 437 428 445 436 449	143 502 355 234 180 131 135 29	11310 11448 11654 12193 11608 12253 12592 12596	423 437 458 437
74137		1			407	1951	1	12350	3.3	407						
74149	3 1	7	13079	3.3	432	1948 1949 1951 1952 1953 1954 1955		8960 13330 15020 13120 14630 13970 12520	3.4 3.3 3.4 3.4 3.2 3.2 3.3	304 439 508 445 472 446 409	1 1 1 1 1	8460 9300 10680 11570 11590 10320 11190	309 326 398 438 423 360 404	1	11696 10693	416 378
74007	4 195	468	10850	3.5	378	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	20 77 61 78 72 63 43 27 10 7 5	11023 10969 11835 10977 11427 10987 11616 11495 12560 12124 11178 11380	3.5 3.4 3.5 3.5 3.5 3.4 3.4 3.7 3.6	383 377 417 385 389 382 401 398 390 428 428 411	3 13 19 32 42 59 41 26 5	10420 13065 12170 11565 11230 11024 11250 11470 11559 11617 11450 11675 9610	383 459 437 419 412 402 412 425 440 423 428 443 364	15 38 24 9 7 5 4	10734 10942 11265 11924 12569 12350 11971 11434	386 402 414 453 456 458 451
74633	7 12	23	11031	3.6	395	1948 1949	1 4	9660 12285	3.7 3.6	360 443						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM IHIS STATE ONLY

	DAUGHTER				KUS FR		STATE ONI ECORD AVI		SY SIR	E BY	FRESHENING	YEAK				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS ND.		TEST PCT.	FAT L8.	305-DAY RECURDS NO.		FAT	YEARLY HE RECORDS NO.		
						1950 1951 1952 1953 1954 1955	HOLS 6 3 3 2 2 1 1	10945 10863 10047 8855 9255 15990 18790	3.4 3.5 4.0 3.7 3.9 3.2 3.2	373 380 410 334 355 506 607	1 2 1 1	11510 9630 11400 14300 14790	408 364 438 524 546	2 1 1	7440 13189 14170	316 479 507
747241	59	200	11944	3.5	412	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	33 26 29 31 24 19 12 14 7 3	11295 11693 12408 11360 12435 12227 12326 12985 11856 14687 12695	3.4 3.3 3.5 3.5 3.5 3.6 3.6 3.6	386 393 413 390 434 423 430 449 425 493 460	5 7 6 7 9 11 10 13 /	11788 10689 11993 11520 11769 11731 12078 11675 11481 11397 9885	397 383 428 414 435 421 443 431 430 407 367	2 13 6 3 2	12034 11843 11254 13229 10786	432 432 419 486 407
747242	1	lţ.	12650	3.4	429	1949 1950 1951 1952	1 1 1 1	15240 12590 12030 10740	3.4 5.6 3.4 3.2	516 448 412 341						
748385	2	ų	9015	3.8	331	1953 1954 1955 1958	1 1 1 1	12340 13140 11240 5790	3.6 3.5 3.6 3.9	440 466 403 225	1 1 1	11130 13560 9960	385 479 368	1	10900 11979	388 441
748441	5	14	13592	3.7	503	1947 1948 1949 1951 1952 1953	4 2 3 2 1 1	13648 14185 16020 16210 17910 12100 17010	3.7 3.8 3.6 3.5 3.4 3.3	496 529 569 563 605 398 576	1 1 1	10710 7750 9890 9890 9360	527 362 424 431 405	1	10017	427
749057	790	2248	12014	3.7	445	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	52 155 212 316 334 303 265 198 150 124 110 29	12340 11976 12299 12043 11892 12301 12266 12396 12452 12539 12924 11237	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	460 442 452 442 438 457 456 457 460 467 476 413	10 51 114 193 285 280 250 187 144 107 110 27	11926 12041 12416 11714 11299 11641 11691 11352 11475 11405 11775 10870	445 439 452 432 420 435 444 433 439 436 456	90 253 229 173 118 97 103 29	11402 11420 11814 11778 11568 11774 12268 12513	421 425 443 450 440 451 474 484
749064	1	ц	12875	3.8	480	1949 1950 1952 1953	1 1 1 1	12490 13970 12450 12590	3.6 3.7 3.9 3.8	449 516 483 473	1 1 1 1	13350 12310 12080 11820	497 438 425 416	1	1 17 18	416
750270	1	3	11487	3.7	424	1953 1954 1956	1 1 1	12580 11310 10570	3.7 3.7 3.6	470 421 382	1	11200	400	1	12862	463
750349	553	1594	10796	3.7	399	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 91 206 274 260 230 182 120 77 44 40 32 23 6	9721 10523 11494 10663 11119 11357 11398 11608 12258 12910 12260 12350 12033 11807	3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.6 3.6	367 389 425 393 410 419 424 449 482 446 448 427 423	2 16 44 87 118 149 165 117 74 43 38 29 22 6	12470 11192 11834 11455 11576 11468 11094 11308 11690 11942 11972 11436 11131 13432	505 394 434 422 425 420 410 418 433 444 446 432 421 508	42 112 70 41 36 26 21	10617 11198 11310 12338 11548 12068 11682 13294	389 413 416 462 433 454 441 505
753550	38	80	11233	3.6	404	1948 1949 1950 1951 1952 1953 1954 1955 1957	14 14 12 13 13 8 3 1	9431 11306 11977 12332 12717 13723 13183 12130 16890 12570	3.5 3.6 3.7 3.6 3.7 3.7 3.8 3.4	333 409 427 451 455 505 480 461 571 413	1 2 2 2 6 3 1 1	12830 11165 12055 12470 11985 12373 12010 13760 12560	412 413 438 448 431 441 471 492 453	1 3 1	11478 12215 10878 14421	436 446 409 517
755101	3	7	12297	3.3	405	1950 1951 1952 1953	1 1 1	13400 11460 12320 13440	3.0 3.3 3.0 3.3	405 376 371 445	1	12190 12000 12500 12320	420 377 422 426			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR UF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	BY ST	RE		R	ECORO AV	ERAGE I	BY SIR	Е ВҮ	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECORDS NO.			FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.		305-0AY RECORDS NO.			YEARLY H RECOROS NO.	MILK	
						1954 1958 1959		TE1N 12760 11280 10710	3.8	41B 433 383	1	12570 9050 11920	435 306 409	1	12764 11946 12263	
756626	818	2099	11155	3.7	412	1947 1948 1949 1950 1951 1952 1954 1955 1956 1957 1958 1959 1960		9940 11351 11728 11293 11558 11539 11332 11449 12114 11797 12033 12439 12108 10903	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	427	19 55 95 174 301 283 230 126 121 91 80	13773 11897 11860 12025 11726 11323 11398 11833 11737 11865 12159 12003 12134	426 445 444 446 457		11356 11390 11329 12052 11568 12585 12608 12634	425 423 457
757596	2	5	11372	3 . B	423	1952 1953 1954 1955	2 1 1 1	12040 10060 10910 8600	3.8	460 383 416 328						
758853	3	18	12414	3.5	432	1947 1948 1949 1950 1951 1952 1953	2	11210 13150 11155 12333 12823 13583 12545 10585	3.7 3.8 3.6 3.3 3.4 3.5	410 480 415 447 414 459 428 378	1	13400 14870 12245 14350 13190 10555 11115	491 488		11009 11303	
758950	1	1	11690	3.4	397	1952	1	11690	3.4	397						
760856	527	1551	11482	3.6	406	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960		11181 10766 11361 11815 11233 11706 11949 12721 12397 12731 13133 12043 12273 11360	3.6 3.6 3.6 3.6 3.5 3.5 3.5 3.5 3.5	389 383 412 424 403 415 423 446 437 446 461 419 415 382	14 15 40 87 157 183 190 141 75 65 45	14090 13251 12575 12752 11972 12022 12006 12293 11979 12065 11942 11689 11886 12250	465 462 463 442 438 434 449 441 447 447	172	11324 11960 12402 12294 12501 12267 12529 12206	438 454 455 467 458 465
76 15 05	1	3	11183	3.3	369	1948 1949 1950	1	11450 10800 11300	3.4	355 370 381						
761974	1	1	13300	3.9	517	1952	1	13300	3.9	517						
761977	18	53	13071	3.7	486	1949 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 5 4 7 7 6 5	15268 13165 14419 14131 12412 10596	3.7 3.8 3.6 3.6 3.7 3.7 3.7	586 579 580 467 522 519 454 382 455 508 365	1 4 5 6 5 4 4 3	8500 13650 14305 11970 13388 11860 11828 11373 11568 12047 11005	517 525 460 491 460 433 417 442 451	4 5 2 4 4 3	12443 13178	427 481 499 411 428 490
766065	, ų	9	10237	3.5	351	1950 1951 1952 1953 1954	1 1 3 2 2	8850 9300 10523 11730 10400	3.3	359 332 343 386 358	2	12010 11755 11900	430 413 431	2	11413	410
767275	324	806	10821	3.7	394	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	28 92 122 107 115 100 80 56 36 24 23	11107 11501 10685 10676 11186 11155 12301 12497 12143 11985 10479 12620	3.6 3.7 3.6 3.7 3.6 3.6 3.6 3.6 3.7 3.8	401 418 391 387 407 407 395 438 451 423 436 388 467	14 28 44 75 96 79 54 34 23	11580 11915 11356 11175 11325 11010 11249 11654 11185 11686 11238 11814 11475	441 415 409 421 411 412 438 421 435 426	26 70 49 32 22 20 18	11032 11785	400 410 437 429 432
768210) 46	147	11444	3.5	401	1947 1948 1949 1950 1951 1952 1953	2 8 9 18 24 20 23 15	8945 11053 12053 10638 11995 12339 11320 12485	3.4 3.6 3.5 3.5 3.6 3.6	306 375 420 375 425 443 411 448	5 10 12 21	12630 10594 12879 12141 11971 12538	402 452 435 434		11202 12252	

PENNSYLVANIA

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SCRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y SI	RE		R	ECORD AV	ERAGE I	BY SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.				RECOROS	MILK	FAT	YEARLY H	MILK	FAI
,,,,,	,,,,,			, , ,	60.	ILAK	HOLS		PCT.	L8.	NO.	L8.	L8.	NO-	L8.	LO.
775261	. 1	1	13580	4.1	550	1948	1	13580	4.1	550						
776652	2 181	447	10499	3.5	372	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	85 104	11149 10491 10380 10788 11112 11886 11931 12683 12088 11040 8213	3.5 3.6 3.5 3.6 3.5 3.5 3.5 3.5	403 372 371 380 392 424 411 448 399 382 267	33	11737	440 431 426 419	29 53 29 19 12 7 8 3	11019 11344 11015 11155 10771 11926 10896 10827	422 410 422 418 445 406
776682	2 26	79	12017	3.7	1 <u>8</u> 1 <u>4</u> 1 <u>4</u>	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	12 10 13 12 8 7 7 3 3	11241 12601 13227 12746 12790 12543 12240 9653 13107 10280 10600	3.6 3.7 3.8 3.9 3.8 3.9 3.7 3.8	427 458 485 479 489 483 477 351 500 390 404	3 2 7 8 7 6 6 2 2 2 2	11947 11290 11803 12814 11619 11912 11665 10780 12090 10125 11670	412 445 469 437 444 445 440 471 396	2 6 5 2 2 2	11429 11429 11641 11069 13036 10590 12295	429 445 416 521 411
776883	3 5 3	200	11727	3.5	4 О4	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	16 33 27 37 21 21 18 14 10 2	11198 11205 11771 11558 12503 12499 12795 12280 12057 11600 10300	3.5 3.5 3.5 3.4 3.5 3.5 3.5	395 388 409 402 428 430 446 422 403 407 370	2 6 7 14 9 15 16 14 10 2	13070 11542 12266 12367 12758 12089 11763 12200 12105 10290 12260	408 458	12 10 2 1	10562 11818 11857 10944 9832	425 428 410
777177	7 4	8	14796	3.7	541	1949 1950 1952 1953 1954 1955	1 1 1 1 2 1	11500 12110 13050 12400 11590 14530 18840	3.4 3.5	409 432 441 437 394 547 676	1 1 1 2 1	10890	384 487	1 1 2	13385 11358 12088 11249	439
777728	3 1	2	10525	3.5	370	1951 1953	1	12800 8250	3.6 3.4	458 281						
778235	5 1	1	11010	3.5	390	1950	1	11010	3.5	390						
778322	2 2	9	12936	3.5	448	1947 1949 1950 1955 1956 1957	2 2 2 1 1	15105 10455 14870 13030 9890 11660	3.3 3.7 3.5 3.5 3.5 3.5	501 381 524 459 345 410	1 1 1	14020 11290 10520 11980	512 416 368 450	1 1 1	11347 9450 9766	338
778470) 2	7	12278	3.3	408	1949 1950 1951 1953 1954 1956	1	13900 13100 10940 12950 11210 13800 9830	3.5 3.3 2.9 3.1	466 456 366 378 352 482 336	1 1 1 1	11500 11980 8270 12870	402 418 396 455	1	11587	404
778700	75	255	12011	3.4	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	12 16 23 34 33 39 33 23 19 11 4	10162 9908 11827 11963 11744 12704 12097 13444 13955 14722 15075 14827 14603 15680	3.3 3.3 3.3 3.3 3.3 3.2 3.2 3.2 3.2 3.3	338 345 396 397 384 424 397 439 474 466 494 477 532	4 11 17 21 27 22 18 10 4 3 4	10080 10810 11146 11441 11145 10765 11348 11461 12434 12115 12143 11373 11750	346 396 416 429 407 405 422 434 470 442 461 414	6 20 19 11 4 2	11249 11531 11350 12562 11704 12012 11955	406 427 426 472 435 457 441
779629	7 1	3	9977	3.8	379	1952 1953 1956	1 1 1	10860 9840 9230		412 389 335	1	11250 8390	406 315			
77972	3 196	563	11198	3.6	395	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	24 76 94 93 71 52 47 37 23 23	12445 10936 10791 10795 11624 11490 12553 12223 13107 13215 12451	3.6 3.6 3.5 3.6 3.5 3.6 3.6 3.6 3.5	442 387 381 386 411 404 445 442 461 464 441	2 23 40 49 61 49 41 34 21 22	15580 12217 11483 11430 11538 11635 12060 12105 12126 11769 11260	548 444 423 421 426 425 455 452 457 421	16 46 39 30 21 19	11631 11645 12022 12708 12800 12482 12027	473 483 474

PENNSYL VANTA 3

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-0AY (RECORDS NO.			YEARLY HI RECORDS NO.		
						1960	HOLS	TEIN 11604	3.6	409	5	10190	381	5	11931	457
78023) 1	4	11010	3.7	402	1947 1949 1950	2 1 1	10780 13830 8650	3.7 3.4 3.8	403 473 329						
78076	2	3	11255	3.8	424	1952 1953	2	10870 12610	3.8 3.7	409 468	-	10010 10680	362 371	1	12884	44 1
78088	7 26	87	10724	3.7	398	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	4 9 13 13 13 12 9 5 3 2 2 1	10705 11797 11748 10312 11328 9867 10952 11544 10097 10635 9215 8400 5760	3.8 3.7 3.7 3.7 3.8 3.6 3.7 3.5 3.8 3.7 3.6 3.1	401 442 438 383 417 369 390 418 354 406 333 301	1 4 6 8 9 9 5 3 2 2 1	14290 12005 11032 11640 11418 10937 10832 9963 9540 9175 9830 10750	563 439 390 409 420 392 378 391 348 388 407	3 5 3 2 2 1	11478 10353 9962 10622 8873 10093	424 370 367 439 328 385 412
781009	5 11	45	13178	3.4	443	1948 1949 1950 1951 1952 1953 1954	11 9 7 5 4 4 4	13536 13430 12480 13992 13140 14228 16525 17420	3.3 3.4 3.4 3.3 3.4 3.2 3.5	453 456 420 468 449 454 563 536	5 5 5 3 4 4	13626 13496 13938 13410 12233 12890 13650 15210	468 456 484 481 438 457 483 518	2 پر ا	12688 13527 14552	456 480 494
78142	4 1	1	12630	3.9	496	1954	1	12630	3.9	496	1	12590	443	1	13145	471
78160°	7 619	1704	11014	3.7	408	1948 1949 1950 1951 1952 1953 1954 1956 1957 1958 1959 1960	3 59 151 205 239 256 256 168 105 90 78 70 24	11337 11475 10995 11149 11382 10997 11078 11981 11684 12385 12458 12152 12763	3.6 3.7 3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	413 425 414 419 424 404 408 442 426 447 457 448 461	13 61 112 169 237 246 166 101 89 75 70	12 188 11613 11629 11304 109 72 112 32 11886 11639 11762 11881 12141 12186	440 443 436 422 408 421 444 435 437 444 451	48 232 152 95 87 70 70	11005 11047 11537 12175 11449 12165 12536 12962	418 411 429 454 428 452 466 489
78269	1 3	8	11612	3.6	415	1951 1952 1953 1954 1955 1956	2 1 1 1 1 1	9400 14130 11390 11250 11310 11290 11290	3.9 3.4 3.9 3.8 3.7 3.8 2.9	361 476 447 429 419 424 324	1 1 1 1	13650 11900 14890 15380 13010	479 416 518 531 485	1 1 1	9679 10626 12132 12862	363 393 424 459
78279	4 1	2	10870	3.6	386	1949 1950	1	11140	3.5 3.6	388 383						
78301	7 1	1	11580	3.8	443	1949	1	11580	3.8	443						
78423	1 5	11	11509	3.4	391	1950 1951 1952 1953 1954 1957 1958 1959	2 1 1 1 1 2 2	12895 13810 13690 10720 13800 9035 10575 5080	3.2 3.5 3.7 3.6 3.7 3.4 3.6 3.1	414 486 503 386 517 302 373 157	1 1 1 1 1	11750 10790 11010 8760 9580 9380	451 406 401 342 372 351	1 1 1	10758 8982 9712	401 339 368
78493.	2 1	5	9232	3.8	348	1948 1949 1950 1953	1 1 1 2	9260 9250 9960 8845	4.0 3.7 4.0 3.6	372 339 398 315	2	9340	33 9			
7870 l		463	10355	3.8	387	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	29 82 97 68 55 40 30 25 9 11	10205 10724 10592 10652 10802 10881 11122 10611 13049 11743 12011 2920	3.7 3.8 3.7 3.8 3.6 3.6 3.8 3.6 3.8 3.7 3.8	379 402 396 405 403 408 418 422 407 485 455 440 91	6 13 24 26 32 36 30 25 9	13132 13137 12326 12528 12267 11722 12128 12206 11273 12328 12343 11737	459 479 443 463 4431 454 468 432 465 474	10 27 21 7 9 8 7	11698 11563 12134 12264 12741 12096 12940 10148	432 434 459 467 469 469 481 368
78732		1	12880	3.2	414	1953	1	12880	3.2	414						
78738	2 20	74	11733	3.7	435	1951 1952 1953	1 6 12	12860 11667 11878	4.0 3.6 3.6	513 442 434	1 5 12	12860 13358 11993	471 490 435			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHT ER				KOZ FR		STATE ONI		BY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY RECORDS NO.	MILK		YEARLY H RECORDS NO.	MILK	
						1954 1955 1956 1957 1958 1959	HOLS 11 12 9 7 6 7 3	TE1N 12725 12793 13232 14104 14262 13160 13967		468 472 483 527 534 488 514	11 12 9 7 3 7	13597 12555 12404 13687 13267 13003	492 452 466 514 510 499 529		12862 12944 12480 13156 13385 13589 13988	464 472 460 493 501 523 539
788399	7	22	13197	3.4	448	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 3 3 4 2 3 1 2	11000 11750 12683 14370 12300 13380 15010 17270 11195 11670 10390	3.2 3.3 3.3 3.3 3.4 3.2 5.4 3.3 2.8	355 380 424 473 402 453 490 592 367 332 354	2	17630 11430 12220 12290 11835 12805 12650 14210 12390 8390 11250	566 393 387 419 422 469 458 571 464 291 414	1 2 3 1 2 1	8491 13009 12081 14279 12034 10399 13309	301 472 434 560 446 353 492
789916	245	564	10644	3.7	388	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	12 104 130 90 79 28 35 37 36 13	10353 10659 10638 10848 10919 11725 11074 11839 11572 12056	3.8 3.7 3.7 3.7 3.7 3.7 3.6 3.6 3.6	395 392 391 400 400 433 405 418 411 425	7 59 120 83 74 28 31 33 35	11630 11314 11191 11221 11835 11829 11517 11975 12155 12100	419 416 416 444 444 427 454 455	29 75 67 25 25 27 31 13	10828 11104 11292 12445 11151 12478 12342 12467	406 414 421 461 414 471 463 463
790106	2	2	9120	4.0	343	1952 1954	1	11670 6570	3.3 4.6	382 304	1	7190	272			
790131	59	162	11987	3.6	429	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 23 20 25 22 20 17 11 9 8 5	15370 11766 11573 11522 12073 13016 13115 12920 14386 12356 11032 21320	3.4 3.7 3.6 3.6 3.7 3.5 3.6 3.6 3.6 3.6	530 427 413 420 444 456 471 462 503 446 379 720	18 21 19 16	12726 11981 11136 11317 11613 11718 11428 12216 11050 11250 13710	429 417 399 415 410 432 418 463 408 423 493	7 18 15 11 9 7 4		
791734	30	101	10756	3.6	386	1948 1949 1950 1951 1952 1953 1954 1955 1956	18 17 15 16 8 8 5 6 6	10594 11518 10683 11602 10993 12498 11714 11652 10797	3.5 3.6 3.6 3.5 3.5	383 415 400 411 382 449 420 409 370 358	5 4 9 4 6 5 6 6	10900 12594 11988 11303 10568 11657 11524 11227 10373 11140	394 473 435 403 383 419 411 422 385 411	1 4 6 6 2	10780 11729 10551 10101 10001	384 429 393 378 364
792129	95	266	10876	3.5	375	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959		10648 10362 11515 11053 11822 11259 10958 11234 14080 11420 11363 11833	3.6 3.6	364 357 398 386 405 406 380 489 469 411 413	5 9 14 19 27 18 8 5 2 5 3	11552 12242 11243 11737 12286 11163 10532 12564 14128 12130 12064 12337	415 451 407 421 447 407 386 467 512 453 465		13089 10762 11667 12293 12241 12773 11972	395 432 460 457 472
792315	1	1	19090	3.5	674	1949	1	19090	3.5	674						
792696	37	101	10749	3.6	383	1948 1949 1950 1951 1952 1953 1954 1955 1956	8 21 20 18 10 10 6 5 2	11166 10697 11249 11285 10421 11032 11465 11092 13075 14720	3.5 3.6 3.5 3.6 3.8 3.8	403 377 408 407 370 398 431 399 437 531	5 6 6 5 9 6 5 2	12624 12428 12857 11860 11350 11522 11636 10975 14390	446 449 462 432 417 427 438 417 525	1 6 5 2	11445 11665 11360 12001 13843	427 418 442
793004	. 2	9	12814	3.4	430	1950 1951 1952 1953 1954 1955	1 1 3 1 2 1	13090 14400 13370 11120 12290 11820	3.3 3.4 3.5 3.2	471 475 450 386 392 401	1 3 1 2	12880 13660 11020 10510 12215 9920	474 475 382 370 420 387	1 2 1	12197 11004 12328	380
794214	21	78	10774	3.3	360	1947 1948 1949	4 7 10	10728 10383 11845	3.4	358 350 398	3 4 5	11443 11735 11386	390 403 408			

PENNSYL VANIA 356

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SLRVICL IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM IHIS STATE ONLY

DAUGHTER AVERAGE	BY SIRL	RECORD A	VLRAGE BY STR	E BY FRESHENING	YEAR	
SIRE DAUGHTERS RECORDS NO. NO. NO.	MILK TEST FAI LB. PCT. LB.	FRESH RECORU YEAR NO.	S MILK TEST LB. PCT.			YEARLY HERD AVERAGE RECORDS MILK FAT NO. LB. LB.
		HOL 1950 12 1951 14 1952 14 1953 10 1954 4 1955 2 1956 1	10618 3.3 10665 3.3 10929 3.4 13295 3.3 14545 3.3	345 7 553 9 352 10 369 10 429 4 481 2 447 1	10847 376 10871 379 10912 383 11400 399 13190 455 13780 467 13300 460	10 10613 377 4 11892 412 2 13298 460 1 14464 487
798291 1 1	11840 3.3 392	1951 I	11840 3.3	392		
798451 4 12	13053 3.4 449	1950 1 1951 2 1952 1 1953 4 1954 3 1955 1	12437 3.5	487 498 I 333 I 434 3 439 2 480 I	13490 487 11000 436 12190 437 11610 418 16550 541	1 13701 493 2 11762 435 1 15576 588
798623 124 295	11295 3.6 407	1949 15 1950 42 1951 43 1952 50 1953 49 1954 43 1955 27 1956 13 1957 8 1958 4 1959 1	12034 3.6 10880 3.6 11248 3.5 11362 3.5 11325 3.6 12020 3.7 12201 3.6 10324 3.7 8088 3.5	414 4 432 12 391 19 397 29 403 44 406 42 446 25 446 25 443 13 383 8 290 4 443 1	13445 478 12384 450 10546 392 11538 422 11016 411 11051 413 11238 428 11787 459 10746 397 10468 418 12210 473	12 10479 363 37 10538 394 23 11010 418 10 11614 446 7 11304 426 2 11249 428 1 12524 477
799361 <u>736</u> 2132	12066 3.5 418	1947 12 1948 36 1949 73 1950 115 1951 173 1952 238 1953 281 1954 283 1955 268 1956 177 1957 163 1958 141 1959 127 1960 45	1133y 3.5 11463 3.5 11769 3.5 11774 3.5 12072 3.5 12578 3.5 12915 3.5 12915 3.5 12930 3.5 12930 3.4 12930 3.5 12490 3.5 12490 3.5	409 2 395 10 398 21 406 44 413 92 422 157 441 260 447 276 443 265 434 173 448 160 435 130 429 127	14060 501 12227 454 12526 461 12674 454 12275 450 12262 448 12112 443 12374 449 11952 440 12029 448 11873 443 11814 436	62 12005 432 244 12169 444 238 12584 458 165 12320 449 153 12323 453 116 12718 474 121 12594 464
799799 1 4	11818 3.3 389	1948 i 1949 1 1950 1 1953 I	12680 3.3	328 366 1 417 1 443 1	13470 483 12010 448 12020 411	
799843 19 47	11988 3.8 451	1947 27 1948 5 1949 8 1950 2 1951 1 1952 2 1953 2	11516 3.8 13528 3.8 10765 4.1 12720 3.9 10620 3.7	484 433 502 2 438 1 500 1 393 2 463 2	13190 466 11570 418 9660 374 12330 452 12580 462	
799845 110 311	10074 3.6 361	1948 1 1949 46 1950 56 1951 59 1952 41 1953 366 1955 14 1955 14 1956 11 1957 14 1958 6 1959 6	9873 3.6 9672 3.6 10540 3.6 10897 3.5 11409 3.6 11664 3.6 11593 3.6 11067 3.6 11067 3.6 12198 4.0		16620 555 12770 462 12163 444 12648 459 11858 431 11697 437 12002 465 11175 418 10935 429 11331 453 10348 415 12443 508	11 12164 447 18 11624 427 14 11657 427 11 11326 447 10 11479 456 6 12433 509 1 13385 466
799846 3 3	8093 3.5 287	1947 1 1955 2		208 327 1	10550 337	
800000 2 2	8120 3.3 264	1952 1957	7000 3.2	222 306 I	8330 360	
800015 21 55	11469 3.6 407	1947 2 1948 4 1949 8 1950 13 1951 5 1952 7 1953 1 1954 1 1955 1 1959 1	8075 3.7 12703 3.4 12610 3.6 11339 3.5 11596 3.5 10521 3.5 10964 3.9 9470 3.6 11940 3.4 9870 3.7	299 427 1 448 3 397 5 404 5 373 5 417 6 339 2 402 1	8700 325 10470 371 10776 394 11132 409 10674 395 11017 418 10715 397 10430 402 13160 488 12770 486	2 11293 426 2 9293 355 1 9810 386 1 13930 509 1 14116 523
800240 1 3	10217 3.8 391	1957 1958		483 1 285 1	9570 367 9980 382	1 9777 380

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL DREEDING ORGANIZATIONS--GROUPED BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE	BY SI	RE			ECURU AVE		BY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.	LB.	TEST PCT.	FAT LB.	SOS-OAY (RECOROS NO.			YEARLY H RECORDS NO.		
						1959	HOLS1	11110	3.6	404	1	9410	346	1	10813	405
800245	5 702	1680	11208	3 • B	424	1951 1952 1953 1954 1955 1956 1957 1958 1959	19 104 208 304 330 207 158 155 157 38	10484 11178 11031 11438 11555 11638 11827 11775 11570	3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8	394 426 418 431 438 442 445 447 440	11 81 201 296 321 202 152 136 157	11517 11490 10905 11230 11400 11400 11342 11634 11368	430 429 401 414 424 420 419 435 425 422	59 269 282 178 123 131 150 38	10994 10876 11163 11594 11380 11811 12140 12118	407 405 416 434 424 439 455
800249	3	4	11173	3.6	404	1949 1950 1955	1 2 1	9710 10605 11830	3.8 3.7 3.3	3/3 395 392	1	15340	5 7 0			
800738	3 1	3	12883	3.5	459	1954 1956 1957	1 1 1	17570 8810 12270	3.6 3.6 3.4	634 319 423	1	16080 11490 10040	603 428 375	1	12590 11848	474 435
8 0 25 B 7	1	2	9000	3.6	324	1954 1955	1	9300 8700	3.5	329 318						
802846) 1	1	11690	3.5	406	1953	1	11690	3.5	406	1	15020	613			
802900) 1	1	13260	3.7	484	1951	1	13260	3.7	484						
804734	2	2	10025	3.2	319	1952	2	10025	3.2	319						
805332	2 1	4	11918	3.7	440	1949 1950 1951 1953	1 1 1	13470 12010 11170 11020	3.6 3.7 3.8 3.6	483 448 429 399	1	10980 12680 11740	366 417 413			
805968	65	195	9967	5.8	383	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	5 30 39 34 50 19 14 10 4	9380 9755 10205 9828 10325 10072 11296 11770 11680 11353 9510 11730	4.1 5.9 5.8 5.8 5.8 3.9 5.9 4.2 4.0 4.0	376 381 391 379 400 389 434 457 463 459 386	1 5 11 13 17 16 14 10 4 4 3	10460 12044 12223 11697 11711 10572 11517 11306 12180 12000 10313 11950	359 430 464 434 420 392 430 422 454 447 387 452	5 13 10 4 4 3 3	11225 11283 11309 13296 11625 11685 11518	431 415 420 503 437 430 431
806124	18	69	10388	3.7	361	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 3 4 16 14 9 6 6 4 2	12440 10587 12425 10605 9865 9961 13137 10248 9455 9850 8510	3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.5 3.6	470 394 461 387 361 371 474 367 328 347 380	3 2 3 10 8 6 6 4 2 2	11530 11070 12273 11300 11223 11195 9207 9740 10310 11835 10880	433 408 466 417 389 424 294 364 371 417 386	1 3 6 6 2 2 1	10279 12150 10824 12688 9559 10497 10475	368 455 410 459 353 368 392
806572	2 70	174	10880	3.7	402	1951 1952 1953 1954 1955 1956 1957 1958 1959	25 41 39 29 21 7 5 1	11210 10950 10353 11191 11374 13744 10308 10108 11740 12210	3.7 3.7 3.7 3.7 3.7 3.7 3.8 4.8 3.6	408 407 378 411 417 520 383 300 566 441	8 29 33 29 20 7 5	12734 11763 11288 11587 12302 10197 11998 12208 12190 11950	494 441 420 439 464 390 460 460 466	7 28 20 7 5 5	11338 11127 11429 12277 11410 12077 12034 12066	432 419 430 451 437 457 460 441
807508	3 32	65	10941	3.8	417	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 19 13 12 8 2 3 2 2 1	10800 10947 10385 11356 12834 11705 10657 8185 13855	3.8 3.7 3.9 3.8 3.7 3.8 3.9 3.5	417 429 383 448 493 436 403 317 485 542	1 10 13 11 7 2 3 2 2	11850 10732 10701 10199 11356 12515 9770 9190 12020 10740	406 403 409 403 451 471 38H 380 429 396	8 12 8 2 2 2 2	9824 10399 10424 12764 9363 10965 12088 11848	385 401 403 486 376 445 445
808496) I	1	11950	3.6	435	1957	1	11950	3.6	435	1	11580	432			
8066 78	3 1	4	15258	3.3	509	1951 1953 1954 1955	1 1 1	14720 14660 14880 16770	3.4	493 496 517 528	 	13030 12860 12470 15400	520 472 448 525	1	13701 13451 15576	493 489 588
808860) ś	3	11413	3.8	424	1949 1952	2	12620 9000		468 331						
809813	3 154	479	11016	5.6	399	1947 1948 1949 1950	10 42 80 88	11395 10702 11016 11448	3.6 3.6 3.7	409 389 404 421	2 5 15 29	12060 12166 11247 11312	427 43/ 410 424			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

OAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY RECORDS			YEARLY HE RECORDS NO.		FAT
						1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	HOLS 64 57 49 32 25 8 11 9 2	TE1N 11799 12006 11597 12463 12292 13265 12056 10154 11715 10680	3.7 3.6 3.6 3.5 3.5 3.4 3.4 3.4	431 435 412 444 428 458 406 323 403 362	34 36 43 31 25 8 10 9	12055 11940 11513 11608 12075 12084 11981 10953 11740 11755	442 439 422 428 438 452 425 404 414	7 30 24 7 11 9 2	10895 11708 11659 12336 11538 12177 11031 13053	426 430 433 448 424 445 389 484
811743	3 16	39	12030	3.6	439	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 2 2 4 5 7 6 3	9670 9775 9850 10190 13712 12657 12652 12607 12328 15308	3.7 3.8 3.7 3.5 3.7 3.9 3.8 3.6 3.7 3.6	359 375 360 355 503 496 482 484 459 560	1 1 1 4 7 5 3 3	11800 12520 11960 11373 10073 11104 12784 11297 13060 11993		1 3 3 3 2 3 4	10072 9330 12688 11884 13909 12430 12652	373 403 470 470 517 489 476
812779) 1	3	10497	3.3	344	1953 1955 1956	1 1 1	9550 10080 11860	3.2 3.3 3.3	309 335 388	1 1 1	13470 11780 12880	504 435 479	1	12666 12873	462 470
813025	1	2	10715	3.7	388	1949 1950	1	9830 11600	3.8 3.5	372 404						
813170	1	1	12800	3.5	452	1955	1	12800	3.5	452						
813711	5	10	11677	3.9	450	1952 1953 1955 1956 1957 1958 1960	1 1 2 2 2 2 1	11750 9470 13525 12970 9550 13120 13150	4.5 4.3 4.0 3.9 4.1 3.1 3.4	524 411 532 495 386 410 443	1 1 2 2 1	9460 9610 11790 11825 11015 13710	434 422 445 445 429 494	1 1 2 1	13080 14094 8846 12110	500 545 393 450
814452	2 140	325	11264	3.6	405	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 31 69 85 53 28 20 19 12 2	13190 12052 11384 11318 11120 11194 12064 11705 10528 13535	3.4 3.8 3.6 3.6 3.5 3.5 3.7 3.6	451 450 409 407 397 393 432 411 389 482	3 22 64 84 52 28 19 16 12 2	11660 11934 11365 11122 11189 10601 11504 11634 11576 11370	425 442 417 415 419 405 426 430 443 421	14 71 46 22 16 15 12 2	11170 11015 11229 10750 11442 12007 12264 12236	407 409 419 410 427 448 467 462
615030	56	228	11362	3.7	417	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	24 12 27 32 25 23 20 13 17 8 10 8	12089 12167 12244 11577 12058 11670 12042 11614 12937 11975 13622 11988 11111 5990	3.6 3.7 3.7 3.7 3.7 3.6 3.6 3.7 3.7 3.7 3.7	438 431 455 427 446 430 427 413 480 445 497 426 408 234	1 3 11 14 15 16 18 13 17 8 10 8	13980 13103 12545 11832 12241 11861 11831 10782 11835 11378 12345 12814 12060 9960	462 466 463 446 453 456 449 407 452 442 464 468 444	14 12 15 7 10 7 8	11900 10562 11478 12152 12151 1289B 12382 12273	473 404 451 474 457 457 460 438
815143	3	ų	10297	4.4	452	1957 1958 1959 1960	1 1 1 1	16370 7520 9660 4340	4.4 4.7 3.8 4.6	718 353 368 201	1 1 1	12430 13320 10530 11460	462 477 379 398	1 1 1	14268 12938 11358 12306	555 482 403 446
815236	, t	10	13495	3.4	449	1950 1952 1953 1954 1955 1956	2 2 2 2 1 1	13245 16200 12170 15290 11220 13830	3.4 3.3 3.6 3.2 3.4 3.4	445 504 435 489 382 464	2 1 1 2 1	14110 11240 10870 12410 11710 13430	503 419 395 431 427 493	1	11979	425 562
815907	1	1	8840	3.7	325	1954	1	8840	3.7	325	1	9700	341	1	8437	307
817046	5 1	1	8370	3.5	292	1948	1	8370	3.5	292						
81828() 4,	14	12793	3.3	420	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 2 3 2 1 1 1 1	11980 14545 10630 14735 16180 17770 19490 17520 17410	3.1 3.2 3.5 3.2 3.1 3.1 2.9 3.0 3.1	375 465 367 469 500 543 574 530 543 513	1 1 1 1 1 1 1	12260 13610 13290 13360 13590 13830 13880 16920 15720	430 475 473 466 471 493 504 616 587	1 1 1	12426 12906 13974 14475 15282	455 473 505 522 560
818313	3 1	6	14517	3.6	517	1947	2	14010	3.7	521						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY ERELO.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE

RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAUGHTER	AVERAGE	8Y S1	RE		R	ECCRO AVI	ERAGE 8	Y SIR	E BY	FRESHERING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECUROS NO.	MILK L8.		FAT L8.	ACCORDS		FAT	YEARLY H RECORDS NO.		FAT
						1948 1950 1951 1952	HOLS: 1 1 1	TEIN 13020 11720 16540 17800	3.0 3.5 3.5 3.3	501 405 572 585						
818459	9 97	235	10861	3.6	394	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	31 51 46 27 23 17 16 14 9	10983 11217 10790 11495 11203 11818 11891 11061 10564 14160	3.6 3.7 3.6 3.6 3.7 3.7 3.7 3.7	401 407 394 416 409 434 441 408 371 500	10 28 38 26 23 17 16 12 9	11581 11512 11032 11475 11735 11889 11779 11803 11500 10470	425 430 414 429 440 444 447 448 435 412	14 25 19 16 11 11 9	11191 11106 11099 12254 12036 11955 12674 10028	409 421 419 460 460 461 484 378
816478	3 20	72	11532	3.5	402	1947 1948 1949 1950 1951 1952 1953 1954 1955	14 12 10 6 7 6 3 5	10636 11826 12110 13768 14412 13184 12995 12603 14208 12477	3.6 3.5 3.6 3.5 3.4 3.4 3.2 3.2 3.5	379 409 431 484 495 446 423 401 498 430	1 2 2 3 5 5 5 3	13760 13535 13530 13330 11093 10742 11350 11220 12184 11537	516 537 535 552 430 398 410 408 444 428	1 3 5 3	11587 9832 11277 11583	421 356 413 427
81065	32	82	9698	3.5	340	1947 1948 1949 1950 1951 1952 1953	44, 14 8 5 4 3 2	9758 10000 10870 10088 11578 10630 11565 11540	3.5 3.4 3.6 3.5 3.5 3.6 3.5	341 344 369 364 403 356 399 409	4 2 2 1 1 1 2 2	10685 10845 12275 7090 7870 9510 10830 13220	356 390 420 278 303 409 398 478	2	11882	426
820086	5 77	260	11982	3.7	幹 作 O	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	33 34 32 38 25 28 24 19 16 4 2	11631 11798 12834 12832 12786 13079 13394 13121 14644 13228 13425 13173 10345	3.0 3.7 3.0 3.7 3.7 3.6 3.7 3.8 3.9 3.9 4.0 3.9	423 434 461 479 472 481 489 484 558 515 521 535 407	5 3 10 14 12 18 20 19 10 3 2	12084 13123 12562 13114 14298 12930 12884 12215 12636 13563 13155 12870 10670	456 487 459 475 507 468 472 447 477 517 514 499 408	6 16 16 3 2 3 2	12094 12506 12500 13088 13091 12699 11118	448 459 464 519 518 485 485
820715	5 4	14	9122	3.7	340	1947 1948 1949 1950 1951 1952 1955	1 4 2 2 1 2 1	8740 9880 11270 10010 6270 8260 8350 7700	3.6 3.8 3.8 3.7 3.7 3.8 3.7 3.1	317 375 426 369 231 320 313 242	1	7910 8460	324 322	1	7695 8328	300 329
820752	2 1	3	10343	4.0	409	1949 1951 1953	1 1 1	8500 12200 10330	4.0 3.9 4.0	342 473 413	1 1 1	16320 13870 13980	585 527 494	1	13701	493
82∠065	5 1	2	7650	3.6	276	1958 1959	1	10970 4330	3.7 3.5	402 150	1	11350 12010	411 446	1	12622 12502	462 458
822438	3 1	8	9658	3.1	300	1950 1951 1952 1953 1954 1955 1956	1 1 1 1 1 1 1	11700 11890 10150 10450 7190 9130 6860 9890	2.9 3.3 2.9 3.4 3.1 3.1 3.3	345 307 291 352 223 280 223 301	1	6260 5040 5920 7520 6070	287 283 274 332 275	1 1	7804 6638 6148	
82278	5 1	1	10030	3.2	321	1954	1	10030	3.2	321	1	11960	412			
82283	7 1	2	10355	4.0	406	1950 1953	l 1	8780 11930	4. I 3. 8	360 451	1	12600 13860	438 494			
82291	3 6	12	11054	3.7	412	1951 1953 1954 1955 1956 1957 1958 1959	1 1 3 1 1 2 1 1	9660 13360 11563 12510 11140 9080 9410 13290 10410	3.7 3.8 3.8 3.5 3.5 4.0 3.4	362 510 446 473 387 306 325 527 355	1 2 1 2 2 1 1		399 333 353 402 457 385 400 410 415	2 1 1 1 1		353
82305	5 1	5	15654	3.6	556	1952 1954		13340 15650	3.4 3.3	448 511						

3.5 3.1

3.5

3.4

3.5 L S L

ì

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY GREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

TABLE 15.--- OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY EREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

	OAUGHTEK	AVERAGE	8Y 51	RE		A	ECURD AV	ERAGE 8	Y 51R	E EY	FRESHENING	YEAR				
SIRE	DAUGHTERS	RECOROS	MILK	TEST	FAI	FRESH	RECORDS	MILK	TEST	FAI	305-DAY (CONTEMP	. AV.	YEARLY H	ERD AVE	
NO.	NO.	NO.		PCT.	LB.	YEAR	NO.	L8.	PCI.	L8.	NO.	LB.	L8.	NO.		LE.
83059	3 2	4	12510	2 7	1.50	1066	HOLS		2 .	h . 7						
83034.	5 2	4	12510	3.7	452	1954 1955 1957 1958	1 1 1	13690 14460 12020 9870	3.4 3.5 3.8 3.8	467 506 461 373	1 1 1	10050 10190 8290	354 363 297	1	10715	3/2
830714	4 490	1343	11314	5.7	419	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 32 74 176 253 242 201 112 98 74 64	13820 12476 11254 11422 11306 11670 11759 11893 11968 12528 12454 11079	3.5 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.7 3.8 3.7	469 459 416 423 418 430 434 437 435 462 474 410	15 40 126 239 237 196 109 97 67 63	12324 11492 11232 10863 11297 11553 11354 10978 11364 11579 11464	449 420 415 402 418 429 426 411 430 439 442	65 215 179 99 84 63 61	10708 10875 11265 11993 11523 11630 12409 12732	395 404 419 452 427 441 469 469
83132		1	12220	3.6	440	1955	1	12220	3.6	440	1	6630	223			
83172	. 13	72	12705	3.7	469	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	7 8 8 12 9 3 7 4 3 3 2	11367 11654 13456 12984 13950 13574 12257 11783 13927 12927 12490 13280	3.7 3.8 3.7 3.7 3.6 3.8 3.6 3.5 3.4 3.3	428 438 496 479 513 493 466 441 503 450 426 436	1 4 5 5 4 4 3 3 2 1	11120 12093 11776 12304 11763 12075 11947 11293 8920 8530	425 454 429 438 442 456 437 411 323 327	3 4 3 3 2 1	12586 11911 11987 11769 11374 10562	455 449 458 441 411 392
83186	1	iş.	12820	3.4	440	1956 1957 1958 1959	1 1 1 1	13640 14590 11830 11220	3.4 3.4 3.5 3.6	470 496 389 406	1 1	7800 6600 7550	311 252 282	1 1	9112 9788 9592	365 386 370
831870) 19	38	12349	3.6	445	1950 1952 1953 1954 1955 1956 1957 1958 1959	1 3 3 4 4 3 4 7 8	10060 13307 13270 13210 13883 12427 12958 13390 12633 14470	3.4 3.5 3.4 3.7 3.7 3.5 3.6 3.6 3.5	347 477 454 487 512 434 464 486 437 462	2 3 3 4 3 4 7 8	13430 13233 13117 13488 12647 12160 11696 10931 12020	482 503 505 499 466 474 442 396 457	1 3 3 3 4 7 8 1	13701 13458 13760 14235 11704 11403 11813 12034	473 504 503 532 460 423 433 444
832235	5 1	1	10260	3.7	379	1957	1	10260	3.7	379	1	9640	321			
833599	9 1981	5108	11607	3.7	422	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	23 145 270 433 565 689 648 566 411 377 422 467	12208 11498 11680 11630 11666 11642 11819 12341 12078 12215 122465 12294 12747	3.6 3.7 3.7 3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6	438 422 427 426 423 420 426 446 440 440 450 447	7 48 115 230 383 636 629 548 398 366 384 464	10739 12002 11923 11756 11714 11311 11328 11956 11599 11689 11959 11872	384 439 436 434 435 419 422 447 436 438 450 449	184 592 509 357 341 353 431 90	11377 11351 11618 12089 11692 12228 12512 12610	421 419 431 455 458 472 477
834119	519	1203	10821	3.6	387	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 42 53 123 220 240 185 110 85 75 53	12674 11105 10745 10861 10962 10897 11401 11322 11396 11510 11135 11213	3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	462 405 387 386 389 388 405 405 409 418 400 394	1 13 21 75 205 231 181 110 83 67 53	14500 11285 11584 11545 10978 10986 11462 11199 10970 11203 11515 10958	529 424 429 417 407 426 420 411 428 434	59 207 170 103 68 62 48 12	11335 10715 11032 11456 11306 11506 11829 12110	427 397 409 432 428 441 447
834149	9 479	1318	11300	3.7	421	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 40 87 119 128 183 210 191 133 73 58 38 44	12470 11919 11902 11507 11533 11601 11257 11282 12035 12095 11965 10875 12351 9652	3.8 3.7 3.8 3.7 3.7 3.7 3.7 3.7 3.6 3.6 3.6 3.6	467 441 446 428 430 421 420 446 441 434 393 445 361	9 17 43 62 119 196 184 127 70 53 33 43	10903 11571 11397 111395 11130 10982 11256 11607 11587 11812 11460 11707 11020	402 451 429 431 420 411 422 435 431 439 420 433 401	47 170 118 68 52 28 42	10981 11014 11404 12086 11614 12307 12344 12299	415 411 428 452 437 454 454 455
834222	2 4	14	13022	3.6	470	1952 1953	1 2	12890 16015	3.3 3.6	429 581	1 2	12810 11720	446 423			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

362

DAUGHTER AVERAGE BY SIRE

														YEARLY HE		
STRE NO.	DAUGHTERS NO.	RECOROS NO.	MILK L8.			FRESH YEAR	RECORUS NO.	LB.	PCT.		RECORDS NO.		FAT LB.	RECOROS ND.		FAT LB.
						1954 1955 1956 1957 1958 1959	2	TEIN 12170 10655 11765 13773 14580 16625		473 399 433 506 512 592	1 2 2 2 2	11680 12045 10815 11420 12710	425 404 377 404	1 2 2 2 2	9505 10268 10748 10481 12786	339 361 381 372 473
83460	7 12	50	11083	3.8	414	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 8 9 9 6 4 3 1 1	11656 11433 10838 11267 10435 10815 11937 9360 8290 10420 4820	3.7 3.8 3.8 3.7 3.9 4.0 4.0 4.6 3.9 4.0	428 434 401 416 410 431 471 427 324 421 199	2 4 5 6 4 3 1 1 1	11860 11335 12036 12003 11460 11735 11767 11840 11450 11360 12430	440 428 423 428 443 462 413	1 4 3 1 1	11979 11739 11863 10202 10475 11641 13353	
83472	9 41	110	11164	3.5	388	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	16 19 17 19 11 10 6 6 4	10386 10848 11081 11305 10801 12646 10737 10368 12783 12630 7000	3.5 3.5 3.6 3.5 3.5 3.4 3.4 3.4 3.3	366 380 396 395 383 440 364 353 436 421 228	3 10 12 17 11 10 6 6 4 1	12227 11070 10404 10174 10789 10945 10883 10298 11528 14600 11510	411 413	7 11 9 6 4 1	10431 10232 10843 11923 10192 10497 13080 13233	436 376 382 494
83530	2 5	13	11996	3.8	452	1948 1949 1950 1951 1952 1953 1954 1955	1 1 1 2 2 2 1 3 1	9800 13140 12500 11990 13715 14300 12013 12750 12280	3.5 4.0 4.0 4.0 3.9 3.7 3.6 4.0	345 524 502 477 532 562 444 461 487	1 2 1 2 1	11670 11175 13780 10580 9020 14590	417 435 529 443 423 573		9330 10028 12393	439
63557	9 15	54	10228	3.6	366	1947 1948 1949 1950 1951 1952 1953	5 6 12 11 8 7 3 2	9860 10892 10680 10085 11168 10496 10740 11760	3.6 3.6 3.5	363 390 381 366 393 360 380 412	1 1 2 3 3 3 3 2 2	11640 11500 11600 10927 11453 11753 11100 12950	404		11293 11892	
83558	4 21	58	11099	3.5	386	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	1 12 11 8 9 8 4 1 1	7710 11742 11666 10234 12234 11344 11510 10150 18230 20400 17280 16000		263 415 419 358 428 387 378 574 541 640 520 468	1 3 1 5 6 4 1 1 1	15370 12633 10220 13962 11207 12320 9610 11220 11520 10440 8900	522 435 475	4 1 1 1 1	10742 7859 11936 11140 10486 9908	420 368 429 333 376 354
83591		26	11757	3.6	418	1947	26	11398	3.5	399			170	7	10001	
83592		7 64	11693	3.4	396 443	1956 1951	7	11693	4.0	396 443		11354	379	3	12801	430
						1954 1955 1956 1957 1958 1959	1 1 7 19 29 5		4.1 3.8 3.3 3.8 3.9 3.9 3.9	363 342 269 405 468 458 424	1	10570 11020 8570 10093 11537 11883 10998	387 314 393 428	1 7 16 27 5	11685 11205 10134 11457 12548 11491	
83723	1 227	572	11803	3.7	435	1952 1953 1954 1955 1956 1957 1958 1959 1960	44 127 110 90 63 44 48 37	12609 11738 11682 12096 12834 12613 12840 12084 12821	3.7 3.7 3.7 3.7 3.6 3.6 3.6 3.6	471 439 431 452 476 457 465 437	123 105 89	12471 11632 11723 12134 12413 12226 12419 12241 13282	432 437 451 463 454 462	42 102 79 54 37 43 35 ÿ	11763 11464 11466 12695 12497 12681 12915 13511	429 427 479 469 472
83732	6 67	171	11762	3.6	418	1951 1952 1953 1954 1955 1956 1957 1958 1959	17 41 32 30 17 9 6 9	12126 11939 11293 11847 12775 12354 12973 13074 12420	3.6 3.5 3.5 3.5 3.5 3.5	399 413 445 437 455 464	30 29 17 9 6	9d52 11215 11128 11282 11905 11014 11907 11286 11674	414 410 417 449 408 458 419	11 24 17 9 6 9	10892 11077 11723 12395 11765 11906 11678	433 461 456 451

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE					STATE UNI		8V 510	E BY	FRESHENING	YEAD				
						ľ	CECORO AV	EKAGE	DY SIK				. AV.	YEARLY H	FRO AVE	HAGE
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		PCT.	FAT LB.	FRESH YEAR	RLCOROS NO.	LB.	TEST PCT.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	RECOROS NO.	MILK	FAT LB-
						1960	HOLS	12/00	3.8	47B	1	11870	469	1	12230	477
837641	1	1	10530	3.4	362	1959	1	10530	3.4	362	1	7690	286	1	8502	350
838760	24	89	10276	3.6	366	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	13 13 17 12 9 6 6 4 3 3	9515 10070 10719 10585 9777 9937 11962 10943 12527 11203 11823	3.6 3.6 3.6 3.6 3.6 3.7 3.8 3.7 3.8	345 362 390 381 356 350 422 402 470 411 424	1 1 4 4 5 4 3 3 3	10210 10350 10750 10373 9648 12057 11183 11090 10603 10630	35 I 344 39 I 372 35 I 424 416 410 40 I 39 8	1 4 3 3 3 3	10377 9979 12237 10664 10904	386 361 441 400 410
839232	. 58	137	10287	3.6	370	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 27 22 20 18 13 9 9 1 3 3	9765 10557 10606 9932 11348 11025 11958 11477 12350 13607 10867 12640	3.7 3.6 3.6 3.7 3.6 3.7 3.6 3.8 4.1 3.5	360 381 382 361 407 402 435 412 475 555 383 382	2 8 7 11 10 8 7 1 3 3	11270 11731 11866 12265 11143 11923 10933 10620 12823 11560 9930	403 434 445 446 424 443 421 425 467 434 374	2 8 7 1 2 3	10404 11466 11453 13298 11963 12451 10780	381 426 432 526 459 469 393
839500	1	1	5930	4.2	247	1951	1	5930	4.2	247						
841476	3	8	11179	3.6	405	1953 1954 1955 1957 1958 1959	2 1 1 2 1 1	9305 10360 10020 12275 8020 13720	3.5 3.8 3.7 3.5 4.0	326 388 385 447 277 543	2 1 2 1	10860 10950 9870 9500 9050 11670	406 419 377 336 355 423	1 2 1 1	9047 9729 8796 13908	362 347 349 504
842652	1	1	6900	3.4	237	1959	1	6900	3.4	237	1	11060	402	1	10388	366
842781	119	331	10588	3.7	390	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	25 25 28 36 53 47 41 29 18 15 9	9373 10598 10843 10822 10713 11131 11837 12419 10938 11454 11613 7670	3.8 3.9 3.8 3.7 3.7 3.7 3.6 3.5 3.6 3.5 2.8	359 406 407 393 390 403 433 428 439 390 423 408 214	1 4 9 25 42 44 40 27 17 14 8	9730 13220 12291 11678 10917 10810 11568 12030 11620 11477 12404 12280 5910	325 449 448 416 400 399 427 443 429 466 466 224	12 37 28 17 11 8 4	10312 11027 11478 12171 10365 12790 12312 10998	384 406 420 446 402 474 465 402
842876	3	7	10803	3.9	414	1954 1957 1958 1959	2 1 3 1	10830 9610 12200 6900	3.9 4.1 3.9 4.1	415 393 467 283	2 1 3 1	11550 8340 10093 9560	422 301 392 354	1 1 3 1	10867 8088 9792 10104	393 302 375 387
842933	71	159	10487	4.1	426	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	8 40 36 27 19 7 6 6 8 2	11731 10873 10040 11077 11609 10750 10758 11913 9189 11240	4.0 4.0	498 449 417 446 479 431 432 466 375 442	3 23 33 26 19 7 6 6 8 2	11027 12378 11783 11772 12132 11889 11832 1158B 11663 10740	403 461 442 446 456 448 433 426 438	9 23 18 5 6 5 7 2	11508 11849 11689 12609 12090 13516 12719 12017	438 447 444 464 462 493 481 434
844852	. 45	134	12519	3.4	431	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	19	12249 12083 13500 13725 12671 12897 12796 15087 12912 13638 14377 13603	3.5 3.5 3.5 3.4 3.4 3.4 3.6	474 440 461 442 495 443	12		500 473 492 434 469 468 471 509 546 48B 519	9	12284 12557 12386 12602 14203 12631 13963 12757	473 469 472
845699	87	213	10661	3.5	376	1947 1948 1949 1950 1951 1952 1953	1 19 40 43 33 20 19	11100 10460 10724 10444 11291 10536 11873 12131	3.5 3.6 3.6 3.5	402 381 420	14 14 17	11270 12094 12618 11534 11769 11108 11678	423 438 454 423 427 410 420		11690 11183	

PŁNNSYL VAN [A

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

DAUGHTER AVERAGE BY SIRE

											305-DAY (CONTEMP	. AV.	YEARLY H	ERD AVE	RAGE
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		PCT.	FAT L8.	FRESH YEAR	RECURDS NO.	L8.	PCT.	FAT L8.	RECORDS ND.	MILK LG.	FAT L8.	RECORDS NO.	MILK L8.	FAT LC.
						1955 1956 1957 1958 1959	HOLS 12 4 6 2 2	TEIN 12497 11028 11233 13090 8380	3.4 3.5 3.5 3.4 3.9	425 389 397 439 311	11 4 6 2 2	11369 11945 11625 13695 10810	425 440 436 525 418	12 3 5 2 2	11133 12368 10970 13309 13336	406 459 404 497 502
84574	7 814	1735	11925	3.9	459	1952 1953 1954 1955 1956 1957 1958 1959	12 71 175 263 189 260 328 355 82	12402 11757 11677 12242 12022 12149 12439 12194 11748	3.7 3.8 3.9 3.9 3.9 3.9 3.8	453 451 450 475 464 469 480 467	9 70 172 259 136 257 302 353 81	11889 11367 11588 11946 11740 11777 11995 11860 11506	444 421 432 447 438 441 448 444 444	18 161 247 180 233 276 330	10882 11470 11498 12318 11778 12277 12549 12533	410 427 427 463 444 461 470 472
84 59 6	8 118	348	11331	3.5	398	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	15 50 68 53 45 30 35 19 13 11 7	12206 11026 11437 12165 12444 11942 12785 12685 12372 12095 11856 12030	3.6 3.6 3.5 3.5 3.5 3.5 3.5 3.5 3.4	450 394 405 433 434 416 444 440 419 407 391 403	6 21 32 34 39 29 34 18 12 11 7	13350 11648 12116 12249 12127 12156 12546 12306 12108 12022 11133 11620	481 432 447 453 447 443 465 464 450 452 417	10 26 31 17 11 10 7	11899 11946 12271 12754 11890 11702 11769 13244	444 457 481 442 441 502
84642	5 14	30	12657	3.6	456	1954 1955 1956 1957 1958 1959	1 1 7 11 8 1	13300 14900 14310 13149 13169 11386 13940	3.4 3.5 3.7 3.6 3.5 3.7 3.6	459 525 523 472 463 417 533	1 1 1 6 9 7	12990 13770 11410 12428 11420 11621 10820	496 532 474 454 420 426 408	1 1 1 6 8 7	12557 12361 13854 11356 11625 12063 14116	468 460 529 416 423 440 523
84685	6 1	1	13330	3.2	427	1952	1	13330	3.2	427						
84697	9 4	7	11451	3.7	426	1955 1958 1959 1960	2 1 3 1	11030 9490 11640 11550	3.5 3.9 3.7 3.7	387 370 438 432	2 1 3 1	11070 11890 11403 11910	401 433 412 416	2 1 2 1	9483 11358 12503 13102	346 421 465 479
84750	5 2	2	9385	3.4	310	1955 1957	i 1	7650 11120	3.9	300 319	1	9040 8970	329 310			
84757	9 32	64	11304	3.9	439	1954 1955 1956 1957 1958 1959	2 5 5 10 21 20 1	11405 11312 11532 11220 11369 11674 16870	4.2 3.8 3.7 3.8 3.9 3.9 4.0	474 431 429 432 439 456 673	2 5 10 18 17 1	10995 11446 11954 11574 11983 10902 15500	414 425 440 428 446 406 567	2 3 4 10 15 15	11750 11925 12731 12130 11837 12002 15860	443 429 452 449 436 452 606
84806	3 206	476	12223	3.5	429	1952 1953 1954 1955 1956 1957 1958 1959 1960	100 107 85 51 40 37 39	11923 12351 12598 12387 12549 11850 11940 13200 13240	3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	419 436 441 437 443 421 422 460 474	3 90 101 79 48 38 30 38	10907 12559 12595 12175 11922 11763 11480 12249	378 452 451 443 439 433 421 450 456	14 89 72 47 37 28 37	12676 12244 12359 12207 12169 12372 12718 13249	458 446 446 442 443 455 467 484
84997	2 15	36	9414	3.8	354	1953 1954 1955 1956 1957 1958	5 4 6 7 5 6 3	9640	3.8	356	5 5	11334 11438 9435 9579 12356 12014 12413	461 428	5	10540 11478 10366 9548 10094 11831 12161	372 428
85029	8 1	1	10740	3.7	402	1955	1	10740	3.7	402	1	12100	438			
85272	5 1	1	5820	3.7	215	1955	1	5820	3.7	215	1	14170	517	1	12045	420
85326	1 27	67	11311	3.6	408	1947 1948 1949 1950 1951 1952 1953 1954 1955 1957 1958	10 + 11 5 4 3 2 1	10753 11885 12189 10832 12840 11862 11965 10127 16155 13240 12570 14100	3.6 3.5 3.5 3.7 3.6 3.5 3.6 4.1 3.4	430 437 379 455 440 429 357 571	2 3 4 3 2 1	12530 11960 11597 12065 10913 10370 14735 12750 12810 11900	433 430 442 399 381 505 443 473	3 2 1	9559 9897 14764 10279 10224 12590	369 532 373 359
85421	0 31	108	12103	3.8	458	1948 1949 1950	- (12213 13313 13550	3.7	501	6	16220 13922 12940	521			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVLRAGE	8Y SI	RE		R	ECORD AV	ERAGE E	SY SIR	E 8Y	FRESHENING	YEAR				
SIRE	DAUGHTERS					FRESH	RECORDS	MILK	TEST	FAT	RLCURUS	MILK	FAT	YEARLY HI	MILK	FAT
NO.	ND.	NO.	L8.	PCT.	L8.	YEAR 1951	NO. HOLS	TE1N 12041	PCT.	L8.	NO• 5	L8.	L8.	NO.	L8.	LB.
						1952 1953 1954 1955 1956 1957 1958 1959	7 8	12420 11486 12021 12908 12046 12768 12574 12510 9773	3.7	465 421 457 491 442 471 473 482 367	7 8 12 8 9	11511	428 448 442	7 10 8 8	12895 10282 11750 11962 12193 11809 11784 11827	387 444 448 459 439 442
854298	437	1144	10626	3.9	412	1951 1952 1953 1954 1955 1956 1957 1958 1959	43 160 250 227 165 102 76 65 49	10240 10672 10612 10741 11262 11772 12055 12224 11906 13547	3.9	400 422 413 417 435 452 455 462 448 522	25 120 223 222 159 100 74 58 48		429 422	79 213 155 93 65 52 45	11264 11277 11197 11822 11735 12184 12939 13167	
854668	2	6	10715	3.5	372	1955 1956 1957 1958 1959	1 1 1 2	9860 10750 11300 11730	3.8 3.6 3.0 3.0	376 390 345 354	1 2 2	9310 12240	450 361 436	2	11107	
854723	1	3	9370	3.8	358	1954 1955 1957	1 1 1	8270 9680 10160	3.8 3.7	396 329 372 373	1 1 1	14090 11640 10250 10990	489 433 392 421	1 1 1	12513 10835 12045 9963	390 450 366
855351	4,	6	12231	3.5	42 2	1950 1952 1953 1958 1959	1 1 2 1	14670 11970 12675 8060 14960	3.3 3.1 3.4 3.7 3.5	486 373 429 297 525	1	14590	520			
855693	14	47	12884	3.6	457	1947 1948 1949 1950 1954 1952 1953	10 10 4 7 7 5 2 2	13273 13145 14110 13803 14243 13494 12050 14075	3.5 3.6 3.2 3.5 3.5 3.6 4.1 3.4	457 472 456 483 498 484 494	1 2 1 2 3 3 3 2 2	15680 12535 9370 11300 10547 11567 9950 12200	593 497 315 434 411 448 367 453	2	11718	426
856661	2	7	12272	3.7	459	1954 1955 1956 1957 1958 1959	1 1 1 1 1 2	13150 10380 8160 9180 10650 12270	3.4 3.4 3.4 3.3 3.8	437 350 278 308 350 466	1 1 1 1 2	9740 10090 5640 7900 9840 11965		1 1 1 1 2	8894 9189 8121 8208 12148	
856728	1	1	13820	3.2	440	1947	1	13820	3.2	440						
857217	79	187	10362	3.6	374	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 24 24 33 29 19 16 13 6 8	9975 11103 10518 10236 9810 10992 11565 10653 11077 12609 9618	3.8 3.7 3.6 3.6 3.5 3.5 3.5 3.5 3.5	376 407 377 369 352 387 417 380 396 436 350	7 10 19 26 18 14 12 5 5	12170 11861 10746 10730 11014 11280 11285 11444 11866 11285	431 397 399	11 16 12 12 4 5	10900 10289 10912 11710 10976 11543 11426	391 374 408 428 431 425 436
857269	2083	5041	11548	3.8	432	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 146 367 606 701 775 536 569 587 609	9780 11900 11587 11546 11770 11675 11717 11901 11870 11899 12197	3.8 3.7 3.7 3.7 3.8 3.8 3.8 3.6 3.7	364 440 431 441 441 444 447 445 440	1 87 224 551 662 743 508 558 517 602 139	11030 11912 11823 11502 11664 11584 11393 11663 11583 11560 11535	470 436 438 430 437 442 436 448 448 437	136 579 679 485 429 473 554 141	11199 11320 11675 11741 11791 12028 12082 12391	412 421 439 449 443 465 465
857482	. 1	1	8080	3.6	290	1957	1	8080	3.6	290	1	9040	343			
858418	3 14	29	12074	3.8	455	1952 1953 1954 1955 1956 1957 1958 1959	1 1 1 2 5 8 3 2	10870 10300 12830 11550 9695 11934 12855 11244 15425	3.8 3.9 3.8 3.9 3.7 3.8 3.8 3.8	408 405 493 454 361 449 483 424 588	1 1 1 2 5 7 8 2	11080 10980 10660 12910 12165 11644 11561 11434 11255	413 397 371 496 453 430 436 417 434	1 2 5 5 7 7	11434 12328 10828 12190 11772 12089	425 471 398 453 431 455
858626	1	1	13430	4.1	548	1950	1	13430	4.1	548						
858901	1 12	34	11793	3.5	411	1952 1953 1954 1957	3 1 1 9	8320 6740 8520 12266	3.6 3.1 3.0 3.5	297 208 254 425	5 1 1 9	9820 6050 8930 11240	355 205 305 425	1 7	5962 11918	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY CREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTLK AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAI L8.	FRESH YLAR	RECURDS NO.		TEST PCT.	FAT LB.	SOS-DAY RECORDS NO.			YEARLY HE RECORDS NO.	MILK	
						1958 1959 1960	HULS 9 9 2	13283 13481 6015	3.4 3.5 3.4	455 468 206	9 9 1	12090 12963 11870	455 493 492	8 8 2	12325 13216 14372	465 506 527
85903	1 10	22	9179	3.8	346	1947 1948 1949 1950 1951 1952 1953 1954 1955	4 2 5 4 3 1 1 1	7753 9635 8566 10310 10307 10630 10136 7070 6870	3.8 3.7 3.9 3.0 3.7 3.7 3.9 4.0 3.5	295 350 330 387 374 414 409 250 275	i 1 1 1	11520 5000 5370 13840 8740	393 227 296 445 382	!	1135d 6562	411 306
85750	6 153	387	10444	3.8	399	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	16 70 81 60 47 31 25 25 24	1202b 10308 10035 10645 10459 11132 11408 11391 11943 12166	3.7 3.9 3.9 3.8 3.0 3.6 3.8 3.8	447 599 385 405 402 425 429 435 447 449	8 38 75 58 45 30 25 25 24 8	12228 11431 11532 11573 11500 11406 11540 11986 11874 12129	441 418 428 436 440 429 436 454 452	27 54 40 29 19 22 20 8	11173 11318 11770 11469 11518 12504 12419 13011	412 421 441 430 435 472 471 493
36076	8 2	3	11513	3.4	394	1954 1955 1959	1	10000 13110 11470	3.4 3.6 3.3	343 472 379	i 1 1	8470 9980 10040	329 384 362	1 1 1	9625 10137 10987	370 375 407
86110	4 47	147	11322	3.8	425	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	6 27 27 24 21 12 9 6 7 3	12305 11104 12016 11371 11790 12858 13300 13455 12601 13173 10517	3.7 3.8 3.8 3.7 3.7 3.8 3.8 3.6 3.6	453 416 453 427 437 483 503 483 450 533 369	2 11 16 15 21 12 9 6 7 3 3	12595 12841 12308 12315 11756 12478 13609 13220 12137 12867 10697	444 461 459 463 441 475 529 502 450 500 387	5 12 9 6 8 3 2	12206 12543 13041 13084 11859 13327 11658	463 462 489 50 44 50 4 435
86∠∠4	8 10	26	10819	3.5	386	1954 1955 1956 1957 1958 1959	6 2 2 4 5 7	9870 11915 10265 12295 14356 12746	3.6 3.5 3.4 3.6 3.6 3.5	361 414 342 440 522 452	6 2 2 4 4 7	10768 11865 12980 12110 12458 11456	386 418 449 432 454 426	3 1 1 4 5 7	10050 13004 13407 11530 12328 12136	369 456 464 421 454 447
86371	0 2	ų	10595	3.6	377	1952 1955 1956	1 2 1	10340 10565 10910	4.4 3.4 3.0	456 361 330	1 2 1	11540 11150 10400	441 403 387	2	11233 9810	419 372
86375	6 66	159	11424	3.7	420	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 5 19 30 28 20 17 19 16	13430 12720 11221 10525 11353 11173 12226 12055 14189 11670	3.0 3.8 3.6 3.7 3.7 3.7 3.7 3.7	487 488 408 388 419 409 451 452 521 418	1 5 19 28 26 19 17 18 16	12210 13048 10674 10512 11070 11002 12225 12278 12466 12590	454 478 393 387 411 403 450 457 460 456	26 25 17 16 17 16	11769 10634 10655 11391 11390 12473 12843 13519	439 389 395 415 423 470 473 494
8637 6	3 3	3	12007	3.5	416	1954 1958	2	12500 11020	3.5 3.4	438 372	ı	9940	362			
86407	9 91	232	10255	3.6	369	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	19 37 47 46 53 23 8 10 7	10074 9994 10366 10455 11273 10954 11560 10724 10391	3.6 3.6 3.7 3.6 3.5	370 361 371 373 407 404 418 380 368 540	7 17 31 42 32 23 7 10 6	10310 11825 10897 10737 11058 10578 10583 10236 10770 11335	402	13 28 21 8 8 5	10156 10705 10753 10741 10017 11375 11309	387 400 400 408 364 423 421
86481	8 1	4	12335	3.6	447	1956 1957 1958 1959	1 1 1 1	10720 13780 12480 12360	3.6 3.6 3.5 3.8	386 491 441 468	1 1 1	13390 10470 12030 13510	459 348 429 481	1 1 1	11249 11369 12764 13908	395 372 457 504
86532	3 34	46	11711	3.8	448	1957 1958 1959 1960	5 10 25 6	11242 10657 12346 10380	3.7 3.6 3.9 3.8	414 377 482 383	4 9 25 6	8940 11686 11682 11593	351 427 433 406	3 7 23 4	9207 11277 12249 11176	350 417 450 422
86532	5 2	3	11715	3.9	453	1953 1958 1959	1 1 1	12630 10180 11420	3.6 4.0 4.2	460 406 463	1	11350 8530 9460	393 389 432	1	10410 10606	460 483
86551	3 1	2	14075	4.5	621	1958 1959	1	13340 148 1 0	4.6 4.3	610 643	1	12490 14390	492 536	1	12535 12917	482 498

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BELLD,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y SI	RE		R	ECORD AVE	ERAGE 8	Y SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KLCORDS NO.		TEST PCT.		305-DAY (RECORDS NO.			YEARLY HI RECORDS NO.		FAI
							HOLST	TEIN								
866146	475	1098	11755	3.7	428	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	26 95 171 221 197 111 89 79 88 21	11496 11599 12041 12084 11632 11975 12252 11941 12432 12530	3.6 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.5	413 420 438 440 426 441 454 439 449	12 66 153 210 190 100 86 71 85 21	13463 12421 12282 12136 12004 11999 12120 11949 11833 11711	477 441 440 438 439 448 448 440	35 191 175 108 79 63 62 21	11881 11833 12200 12050 12193 12916 12486 12606	423 431 443 446 435 484 465 476
866148	1	3	9683	3.6	352	1955 1956 1957	1	11170 9340 8540	3.4 3.6 3.9	384 340 332	1	8650 8490 8000	354 334 329			
d66635	2	5	10744	3.9	414	1952 1953 1957	2 2 1	11170 10235 12350	3.8 4.0 3.7	426 401 456	1 1 1	11530 9890 11400	405 342 408	1	10824	377
867135	435	1033	11593	3.7	425	1952 1953 1954 1955 1956 1957 1958 1959 1960	2 128 209 188 118 129 120 107 32	10555 11537 11871 11888 11425 11536 11610 11639 11485	4.1 3.7 3.6 3.7 3.7 3.7 3.7 3.7 3.7	428 423 433 437 419 422 433 425 407	2 116 201 179 112 120 96 104 32	11685 11111 11569 11526 11622 11477 11597 11351 10860	441 434 441 441 443 443 443 434	30 166 163 109 97 89 97	11056 11308 11524 11647 11669 11935 11857 12182	419 419 432 441 442 459 454
867412	4	žţ.	12370	3.8	463	1955 1956	2 2	10870 13870	3.9 3.0	423 504	1	92 9 0 12730	353 499	1	7183 11249	326 437
867523	1	5	14276	3.5	504	1952 1953 1955 1958 1960	 	13960 14870 14600 15540 12410	3.6 3.6 3.6 3.4 3.2	509 542 531 535 402	1 1 1	14500 11550 13400 12320	482 442 478 435	1	14443 12 7 86	528 470
867648	181	401	11542	3.7	426	1953 1954 1955 1956 1957 1958 1959	52 97 91 36 48 40 28	12406 11814 12033 12446 12164 11460 11810 10387	3.8 3.7 3.7 3.7 3.7 3.7 3.7 3.8	469 437 449 463 448 422 436 390	51 95 90 35 47 34 28	11735 11380 11913 11731 12271 11661 12174 11204	438 425 450 451 460 446 460 410	21 86 82 34 44 28 26	11753 11442 11720 12201 11795 12049 12870 11749	439 422 438 463 445 460 483
863940	50	150	12210	3.5	424	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	32- 24- 30- 17- 14- 10- 14- 3- 3- 1- 1- 1	11794 12031 13023 12407 13320 14480 12491 9743 17097 16260 14610 12440	3.5 3.4 3.4 3.5 3.5 3.6 3.6 3.6	415 420 446 422 401 493 432 541 597 646 523 450	2 3 8 7 8 8 14 3 3 1 1	12775 12500 12030 11634 12461 12026 11224 11143 14333 12e50 13770 8270	423 432 433 431 461 440 424 7417 519 515 482 309	3 3 1 1	11855 10595 13444 14094 12415 8938	432 389 401 545 470 32)
869394	1	1	14790	3.8	567	1959	1	14/90	3. გ	567	1	12420	414	1	13353	408
869473	1	5	14434	4.0	582	1952 1953 1954 1956 1958	1 1 1 1	13350 14960 12990 16090 14780	3.7 3.7 4.4 4.2 4.2	494 553 568 675 619		11810 13740 12210 13460	420 500 484 502	1	11816 13647 13625	408 500 4₹5
86 79 46	2	2	8710	3.9	334	1955 1960	1	7930 9490	4.U 3.1	319 349		12150 10740	419 377	1	12317	412
87 02 40	291	765	10940	3.7	397	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	16 85 100 144 121 79 71 69 66	10106 10343 10700 11203 11410 11771 11899 11387 12016	3.7 3.7 3.7 3.7 3.6 3.6 3.6 3.7	375 380 390 411 416 424 430 412 437 434	7 61 94 142 115 76 67 58 65	11023 11037 10829 11151 11329 11557 10970 10894 11374 11466	405 410 401 413 418 431 409 407 424 429	25 122 109 73 47 56 59	11016 10768 10954 11627 11363 11302 12029 11792	403 399 409 438 419 424 446 444
870458	1	6	14337	3.4	430	1952 1953 1954 1955 1956 1957	 	13190 16240 12540 13070 15810 15170	3.5 3.2 3.5 3.3 3.4 3.4	434 526 436 430 542 511	 	9750 10740 11400 12810 13660 13890	370 396 419 498 514 531	1 1	11532 11434 14061 14846	421 425 535 557
870701	438	910	115/9	3.7	421	1953 1954 1955 1956	35 114 143 137	10609 11040 11876 12024	3.7 3.7 3.7 3.7	388 407 437 438	34 112 140 135	11227 11180 11794 11580	419 422 445 434	7 101 131 128	11081 11105 11446 12225	431 415 429 453

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

BY YEAR OF FRESHLNING--RLCOROS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE

RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	OAOGHTER	AVLRAGE	BY SI	RE		R	ECORD AV	CRAGE :	BY SIR	E EY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY (RECORDS NO.			YEARLY H. RECOROS NO.		
						1957 1958 1959 1960	HOLS 142 142 163 34	TLIN 11850 12536 12290 11963	3.7 3.6 3.6 3.5	434 456 442 420	139 131 163 34	11599 11624 11854 11605	432 434 439 430	122 126 155 33	11494 12131 12392 12660	429 454 458 469
870736	2	2	9435	3.8	353	1957	2	9435	3.8	353	2	9465	328			
87 12 07	2	5	9529	3.5	329	1949 1950 1951 1952	1 2 1 1	8560 10750 10020 7020		311 362 339 245						
871953	3 1	7	12926	4.0	515	1951 1953 1954 1955 1956 1957	1 1 1 1 1	12880 12210 13060 12430 14080 12800 13020	3.8 4.4 3.0 3.8 3.9 4.0	496 537 495 472 543 517 543	 	13590 11950 12840 12880 12830 12310 11490	509 441 473 483 463 475 420	1 1 1 1	11216 12873 11489 13145 13015	427 468 428 476 489
872422	2 1	1	10340	3.8	388	1953	1	10340	3.8	888	1	7690	333	1	5995	274
872565	16	54	10111	3.7	372	1950 1951 1952 1953 1954 1955 1956 1957	8 7 6 11 7 6 5 3	9818 9573 10208 10718 10791 10523 11240 10437 8320	3.6 3.8 3.7 3.0 3.0 3.7 3.4	358 338 379 392 389 390 409 354 241	3 5 9 7 6 5 3	10697 9500 10876 11121 11031 10312 11076 11773 13680	384 348 411 406 418 402 403 429 481	4 6 4 5 2 1	10810 10584 10933 11761 12808 12524	383 396 419 453 461 436
873082	2 34	108	10145	3.6	364	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 22 16 16 12 7 10 6 5	9889 10126 10587 10451 11595 11507 11829 11623 11304	3.6 3.6 3.6 3.6 3.5 3.8 3.8	353 365 384 377 422 415 423 448 425 397	2 11 10 13 11 7 10 6 5	11780 11403 11756 10811 11377 11477 11477 11585 12094 10858	491 427 440 402 426 435 460 458 462 414	5 9 6 9 3 5	12239 11457 11611 12295 11151 13270 12702	443 428 431 468 434 494
873324	. 2	3	10580	3.9	420	1955 1957 1959	1 1 1	16130 16250 4970	4.0	661 646 106	1 1 1	13140 15150 11180	486 549 404	1 1 1	12143 15576 12491	440 571 470
874187	7 1	1	12590	3.1	385	1959	1	12590	3.1	385	1	11480	3 7 8	1	11009	3/2
874306	5 13	19	13284	3.5	466	1954 1955 1956 1957 1958 1959	1 1 2 5 7 2	14480 12470 15130 13680 12172 13469 14730	3.7 3.5 3.5 3.5	531 460 554 483 428 470 506	1 1 2 4 7 2	10590 16570 8970 11028 12219 12180	401 541 313 417 463 445	 2 2 	13026 13347 12491 15413	443 515 493 558
875099	5 ¥	31	11517	3.4	391	1947 1948 1949 1950 1951 1952 1953 1954 1956	11 4 3 3 2 2 2 1 2	10911 12515 12763 10580 11560 10675 13095 15790 14030 16320	3.5 3.7 3.7 3.8 3.6 3.5	381 418 442 375 425 390 498 573 483 604	2 1 1 2 2 2 1 2	12795 12220 15540 8970 10195 11870 12070 12510 13000 13410	428 418 518 304 382 448 434 462 478 486	1 2 1	12372 14519 13244	456 532 489
996678	9 134	399	11127	3.5	390	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 19 42 78 67 61 41 29 22 16 10 7	11180 11966 11359 10992 11282 11658 12457 12137 12743 12557 11943 11330 13187 15465	3.5 3.6 3.6 3.5 3.5 3.4 3.4 3.6 3.3	383 418 397 391 400 410 439 449 440 451 404 377 428	3 9 27 35 38 37 26 22 15 9 6 3	14257 13227 12548 12553 12446 12546 12673 12089 12502 12642 12000 12975	486 466 453 456 449 447 460 444 462 460 429 473	14 28 22 14 9 6 3	11487 12122 12831 12481 12296 12384 12906 13838	464 421 421 421 424 409
87604	5 530	1321	11214	3.7	418	1950 1951 1952 1953 1954 1955 1956 1957	13 47 100 157 177 177 137 147 166	11688 11233 11308 11135 11509 11728 11405 11498 11561	3.8 3.8 3.7 3.7 3.7	436 423 427 417 427 439 425 431	8 22 69 144 172 174 133 145	11766 12107 11932 11182 11531 11709 11645 11644 11665	428 437 442 413 427 438 431 430 432	34 159 158 124 131 135	11090 11400 11650 12058 11178 12300	419 420 432 448 419 459

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	UAUGHTER				K02 FK		STATE ON ECORO AV		31 21 K	E 8Y	FRESHENING	YLAK				
SIKE	UAUGHTERS	KECUKOS	MILK	TEST	FAT		RECOROS					CONTEMP		YEARLY HI		
NO.	NO.	NO.			L8.	YEAR	NU.	L8.	PCT.		NO.	LS.	LB.	NO.		LB.
						1959 1960	HOLS 166 34	11803 11263	3.7 3.6	440 410	106 32	11704 11528	434 429	156 34	12285 12336	456 459
877660	11	27	12960	3.6	464	1949 1950 1951 1952 1953 1954 1955 1957 1958 1959 1960	3 4 3 2 2 2 1 2 3 2 3	14000 13185 14477 15695 14715 12545 9180 11640 13093 12090 9637	3.4 3.5 3.2 3.4 4.0 4.3 3.5 3.6 3.6	479 450 502 482 490 499 394 403 479 434 532	1 2 2 1 2 1 2 1 2 3 2 3	14910 13575 11980 11485 13860 11045 11270 11160 12450 11675 12320	453 468 377 404 431 430 443 417 467 446		11303 11794 12094 12197 11510 12541	437 453 452 457 415 478
87 866 5	3	15	10310	3.8	389	1953 1954 1955 1956 1957 1958 1959 1960	1 3 2 2 2 2 2 2 1	14000 10107 13440 11180 10500 6565 6935 8940	3.6 3.8 3.8 3.9 3.6 3.6 3.6	500 389 509 440 395 246 250 302	1 2 2 2 2 2 2 1	9350 8740 10575 10605 9165 8940 8690 9420	396 323 400 404 351 338 325 346	1 1 2 2 2 2 2	8687 7205 10006 9892 8747 9129 7445	315 267 378 375 336 345 286
8/9153	3	11	11793	J.5	409	1952 1954 1955 1956 1957 1958	2 3 1 2 2 1	12500 11300 15480 13985 15365 9130	3.6 3.2 3.6 3.5 4.2	427 393 495 497 517 387	1 3 1 2 2 1	10310 9430 12710 11845 11975 11040	362 357 448 440 434 383	3 1 1 2 1	8836 13745 13080 12159 11707	338 483 462 446 446
879309	1	2	11880	3.5	410	1955 1956	1	12840 10920	3.4 3.5	435 384	1	13490 12820	483 483	1	12143 12372	432 45 7
879983	\$ 486	983	11398	3.7	420	1952 1953 1954 1955 1956 1957 1958 1959	5 63 150 169 143 140 138 143 34	11590 11094 11422 11709 11540 11801 11976 12168 11579	3.6 3.7 3.7 3.7 3.6 3.7 3.7 3.8	423 403 417 429 425 427 445 448 434	2 59 147 167 137 139 119 143	11265 10675 11650 12157 11670 11638 11386 12184 11753	395 404 435 449 435 430 421 449 431	15 136 155 124 123 110 134 33	10910 11531 11779 12144 11449 12026 12609 12660	402 428 437 451 428 448 466 471
880186	2	2	8095	3.7	301	1955 1956	1	4480 11710	3.7 3.7	167 434						
880210	3	11	9857	3.7	365	1952 1953 1954 1955 1956 1957	1 2 1 1 2 2 2	12420 11155 8770 8740 10535 8205 9150	3.5 3.8 4.2 4.0 3.5 3.6 3.7	435 421 365 352 339 311 331	1 1 1 1 2 2 2	5980 7020 9400 6940 7305 9905 8570	290 340 368 273 327 370 376	1 2 1 2	9047 8213 8088 9129	362 357 302 385
880723	3 1016	2 144	10553	4.3	451	1952 1953 1954 1955 1956 1957 1958 1959 1960	6 129 282 346 230 275 366 399	10925 10570 10673 10417 10516 10775 10856 10940 10761	4.2 4.3 4.3 4.3 4.3 4.3 4.3	448 445 451 451 463 466 467	4 120 274 340 222 271 523 593 108	11758 11242 11772 11650 11630 11674 11677 11558	445 421 440 442 442 448 453 447 438	36 252 314 213 208 293 368 110	10994 11257 11646 11496 11518 11855 12129 12023	407 419 439 445 446 462 471 469
88 13 76	2	6	11748	3.9	451	1955 1956 1957 1960	2 1 2 1	11140 13920 12915 8460	3. y 3. 8 3. 8 4. 2	423 928 485 359	1 1 2 1	11240 10390 13585 6190	440 366 493 222	1 2 1	14998 12557 9625	566 470 355
881760	307	760	10941	3.6	387	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 23 54 77 76 130 117 105 72 40 30 20 12	8980 10190 11388 11406 11394 11386 10999 11535 11947 11201 11499 11153 10703 11273	3.5	325 364 404 406 397 402 389 399 421 389 395 395 368 384	2 9 22 34 89 108 99 69 37 28 19	13481	422 487 460 436 431 405 417 429 405 378 380 411	28 88 66 35 21 18 12 3	11011 10527 11154 11168 10393 10943 11592 10936	410 597 418 416 393 405 431
88176		2	9855	3.4	335	1947	2	9855	3.4	335						
88293	'	2	11045	3.9	430	1958 1959	1	9270 12820	3. 8	367 493	1	10590 12130	416 436	1	9875 10944	365 422
882939		1	9920	3.6	358	1958	1	9920	3.6	358	1	10180	393			
883725	5 4	10	12514	3.3	405	1953 1954	2	11490	3.5 3.1	309 359	i	12460 10570	447 352	1	10017	341

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

	OAUGHTER	AVERAGE	84 21E	RE		R	ECORO AVI	RAGE 9	Y SIR	E BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	KECUKOS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-0AY (RECORUS NO.			YLARLY HI RLCOROS NO.		FAI
						1955 1956 1957 1958	2 2 1	11090 10555 14830 17980	3.4 3.4 3.2 3.2	374 362 457 574	1 2 2	12630 9975 11715	\$74 377 465	2	13702	521
						1959	1	2256G	3.0	078	1	11770	456	1	14944	593
884249		1	14790	4.1	601	1959		14790	4.1	601	1	16290	653	I	13276	499
884334	1	3	9547	3.9	37 2	1952 1954 1955	i	8710 8090	5.7 5.9 4.2	442 336 337	1	10980 8640 9530	402 320 341	1	10028 8753	366 320
884838	3 4	8	9883	5.1	360	1951 1953 1954 1955 1956 1957	1 1 1 2 2 1	10520 11630 11640 8610 10765 10480	3.1 3.4 3.7 3.7	333 366 401 312 347 359	1	9∠80 13060	186 466	1	10017	4z7 508
880511	211	496	11022	3.7	407	1952 1953 1954 1955 1956 1957 1958 1959	46 91 96 70 48 46 43 41	11119 10555 11673 11030 11789 11835 12653 11821 10847	3.7 3.7 3.7 3.7 3.7 3.6 3.7 3.6 3.7	410 392 428 407 432 435 472 446 384	25 77 90 67 47 44 40 41	11712 11330 11609 11700 11953 11995 11720 11927 12447	429 420 433 444 446 451 453 456 482	22 74 55 41 36 32 35	11326 11432 11348 11710 11242 12181 12429 12629	415 422 423 445 420 472 481 489
888593	S 1	1	8650	3.0	263	1957	1	8650	5.0	263	1	8670	303			
889988	1029	2042	11672	3.8	441	1953 1954 1955 1956 1957 1958 1959	42 144 209 200 343 418 548 136	11583 11746 11347 11470 11598 12008 12136 12176	3.7 3.8 3.9 3.6 3.8 3.8 3.8	431 443 437 434 440 455 456	40 141 202 192 337 361 547	11882 11821 11671 11566 11507 11552 11471 11610	448 447 448 440 445 448 448 442	7 129 186 162 231 335 496 134	11703 11481 11628 11867 11251 12094 12073 12263	428 430 441 454 431 467 465 474
889022	2 2	2	10815	3.4	363	1952	ż	10815	3.4	363						
889181	1	1	12000	3.9	471	1956	1	12000	5.9	471						
889260	309	884	10918	3.6	387	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	10 65 117 142 151 123 97 62 47 28 20 15	9742 11116 11342 10823 11213 10936 11191 12106 12474 11756 12355 12709 11994	3.6 3.6 3.6 3.6 3.5 5.5 3.5 5.5 5.5 3.4 3.4	346 396 404 389 398 395 423 436 406 422 427 410 351	7 15 46 67 77 90 58 45 27 19 14	13641 11852 12003 11059 11557 11239 11136 11916 11477 11309 11619 10352 8975	480 445 452 436 427 416 415 446 428 417 431 380 348	19 52 42 25 17 13 5	11078 11288 11969 12081 11414 12491 10941 9957	422 416 445 451 424 462 370 362
889312	2 14	29	11027	3.8	421	1954 1955 1956 1957 1958 1959	6 4 5 6 1	12800 10808 9162 8663 14260 12233 9690	3.8 3.9 3.7 3.7 3.7 3.6 3.2	480 429 341 319 534 460 308	6 1 6	12237 12655 10620 10992 12630 11532 9110	452 459 380 395 453 419 320	6 4 5 6 1 6	10944 12791 11356 10697 12818 12363 10911	402 450 411 383 464 454 305
890181	20	27	10277	4.2	426	1957 1958 1959 1960	1 8 17 1	10010 9868 10459 11700	4.2 4.1 4.2 4.5	422 402 432 529	1 8 17 1	8350 12308 11396 12340	308 456 427 465	1 3 16 1	9189 11493 12262 13745	348 437 455 516
890463	3 1	1	15740	3.7	587	1959	1	15740	3.7	587	1	10150	381	1	10813	405
891636	5 7	13	14028	3.7	520	1952 1953 1954 1955 1956 1958 1959	1 1 2 1 1 3 3	14130 11190 13100 8600 16260 15587 16363 16690	3.5 3.9 3.6 4.0 3.5 3.5 3.6 4.1	461 431 462 345 566 542 625 676	1 1 2 1 1 2 3	13930 13500 12370 8970 9720 12780 13583 15880	522 511 446 323 361 468 507 676	1 1 2 3 i	13451 7532 13593 14348 14562	489 257 568 526 548
89287	7 320	703	10778	3.6	387	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 63 116 167 137 137 83 40 26 32 23 10	11000 10359 10874 10741 11185 11579 11082 11776 12229 11196 11663	3.6 3.7 3.6 3.6 3.5 3.6 3.5 3.6 3.5	397 374 397 385 402 419 389 422 423 377 386	1 51 73 154 131 83 39 24 51 23	12250 11706 11237 11074 11282 11449 11092 11243 11568 11543 12509	470 438 422 413 423 430 416 417 429 423 458	42 118 78 37 24 27 21	11196 11037 11186 11551 10371 12545 12345 12977	426 411 417 423 407 467 453 477

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVIC. IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

											, Aconcaria					
SIKE NU.	UAUGHTERS NU.	RECORDS NO.		1621 PCT.	FAI L8.	FRESH YEAR	KFC0%02		FLST PCT.		305-0AY 1 RECURUS 10.		FAT	RECORDS NO.	MILK	
							HULS	TE Li4								
89228	B 1	1	20500	3.4	693	1951	1	20500	3.4	593						
894501	0 13	51	11021	<i>3</i> ∙7	42,	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 0 0 1 0 4 4 5 4 3 2 1 1	9803 11906 12287 11240 12353 12306 11688 13192 13825 13940 1020 12610	3.7 3.5 3.7 3.7 3.7 3.0 3.5 3.5 3.5 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	361 420 431 415 458 441 404 460 495 522 452 35	3	14240 14057 13440 12955 13035 12120 13046 12550 12677 12460 9510 10910	482 510 483 462 463 457 458 450 454 445	1 3 5 4 3 2 1	11107 12873 12701 12864 11641 12622 11576	407 451 451 417 451 450
89 59 O	5 1	5	11096	3.6	402	1952 1953 1954 1955	2 1 1	12120 4840 10860 15540	3.7 3.8 3.6 3.5	445 186 394 542	1	14540	460			
89591	ن ا	3	11440	3.7	4 3 u	1955 1958 1959	1 1	6050 14770 13500	3.6 3.6 4.0	216 534 540	1 1 1	8260 9520 10910	295 370 430	1 1 1	7586 9875 10944	259 365 422
89591	7	15	11625	3.4	395	1951 1952 1953 1954 1956 1957 1958 1959 1960	1 1 1 1 5 3 3 5 1	13020 12800 11190 10520 15450 10627 11407 11533 10710	3.5 3.4 2.9 3.2 3.4 3.5 3.5	452 427 375 307 492 361 385 399 376	1 1 3 2 3 1	9980 9020 11230 11660 11363 11170	356 335 405 400 415 407	1 3 2 3 1	9189 10406 10579 11928 11262	323 375 303 435 414
89 63 04	4 526	798	11972	3.5	416	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	22 94 155 125 108 93 74 50 19 19	11213 11635 12329 11649 11970 121055 12474 12402 11973 12286 13148 11638 14846	3.5 3.6 3.5 3.5 3.5 3.4 3.5 5.5 4.5 5.5 4.5 5.5 5.5	587 412 437 404 417 421 410 452 442 415 414 447 411 522	3 17 54 41 64 70 70 48 10 19 12	11740 11853 11454 11947 11488 11488 1147 11725 11574 11239 11109 11423 12028 11970	460 448 418 440 426 429 430 441 437 433 463 471		11243 11508 11528 11782 111764 11764 12603 13037	421 425 479 456 417 469 488 513
89630	5 2	8	12028	3.7	459	1954 1955 1956 1957 1958 1959	1 1 1 1 2 1	14000 14750 13000 10140 13380 12645 11570	3.7 3.8 3.8 3.7 3.0 3.0	525 557 488 374 477 458 414	1 1 1 1 1 2	12950 13860 13650 13400 14250 13580 14370	464 532 491 481 515 505 566	1 1 1 1 1 2	12132 12066 13614 14268 14181 13799 14715	433 439 492 523 512 506 561
89685.	3 457	912	10575	3.8	399	1953 1954 1955 1956 1957 1958 1959 1960	73 178 189 130 104 104 111	10520 10306 10648 10857 11251 11751 11099	3.8 3.8 3.8 3.7 3.8 3.6 3.8	397 392 402 413 415 443 417 414		11157 11185 11665 11556 11731 12118 11777 11267	419 417 436 434 437 456 442 420	25 160 168 118 92 67 104 23	11702 11131 11047 11934 11401 12240 12347 11984	448 416 413 452 429 450 464 450
89780	1 75	159	10736	3.7	394	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 29 20 28 24 15 17 11 5 4 3	11515 11120 11410 11043 10938 9368 10202 11617 10934 13095 11707 15570	4.0 3.8 3.6 3.7 3.5 3.6 3.7 3.7 3.6 3.6	447 415 431 397 400 328 361 432 406 468 422 576	3 2 10 111 12 15 10 4 3 2	15917 10860 11415 10923 10013 10519 10468 11008 10703 12000 12350	537 402 403 380 364 360 407 413 393 464 466	4 13 8 4 3 2 1	10292 10416 10221 12088 11732 11500 13058	384 379 365 450 444 440
89819	3 2	8	12574	3.8	472	1949 1950 1952 1953 1954 1955	1 1 1 2 1 1	16156 15500 15030 13250 11795 10340 10170	3.8 3.7 3.7 3.7 3.8 3.8	606 554 578 490 437 393 383	1 1 1 2 1	10950 13110 10160 9770 10335 9390 10000	507 496 426 422 432 384 442	1	10017 9134	427 397
898∠09	5 163	366	11014	3.9	422	1951 1952 1953 1954 1955 1956 1957	6 26 57 76 66 42 29	10520 10996 11280 11114 11432 12064 12217	3.9 3.8 3.8 3.8 3.7	409 430 427 418 430 467 453	18 56 74 65 39 29	12166 11599 11262 10979 11415 11101 11287	424 431 421 411 427 421 428	13 88 55 29 21	10443 10671 11067 11845 11848	347 348 413 442 450

37 ≥

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y 51	RE		R	ECORO AVE	RAGE I	BY SIK	E BY	FRESHENING	YEAK				
SIRL NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-0AY (RECORUS NO.			YEARLY HI RECORDS NO.	MILK	
						1958 1959 1960		EIN 11823 11589 11562	3.8 3.9 3.8	445 452 431	24 27 5	11805 11646 11214	449 436 426	22 26 5	13061 12101 11962	484 455 454
898621	87	275	11555	3.6	416	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	6 31 55 43 39 32 25 15 15 10 6	11870 11280 11349 11664 12363 11718 13060 12557 12577 13716 11530	3.6 3.6 3.6 3.6	425 409 409 417 442 418 465 445 4471 400	2 16 27 33 30 30 24 14 12 8	9175 12225 10917 10805 10776 11003 11365 11193 11044 12163 10947	325 438 408 399 398 407 424 416 429 457 408	11 27 22 12 10 7 6	11093 10563 10920 11619 11012 12672 12337	411 391 406 431 433 468 462
894573	3 1	1	15020	3.4	517	1951	1	15020	3.4	517						
900274	7	9	12369	3.8	471	1958 1959	2	11585 12321		428 467	1 7	10930 11201	394 408	4	11647	424
90 0542	9 307	559	11570	3.7	427	1954 1955 1956 1957 1958 1959		11640 12094 11113 11555 11814 12042 11112	3.1 3.7 3.7 3.1 3.7	405 445 410 422 436 447 407	7 50 69 105 138 156	11821 11462 10702 11172 11396 11576 11192	432 431 395 416 424 433 417	7 45 63 84 128 147 18	11786 11174 11638 10933 11427 12049 12547	430 417 431 411 425 451 473
901196	3	3	7400	2.5	282	1959	3	10507	3.7	394	3	11093	412	3	12840	4/6
90124C	91	267	10472	3.7	389	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 347 47 49 37 32 18 14 7 6	9546 10754 10758 10690 11589 10806 11464 12149 11397 11345 13468 10683	3.7 3.7 3.6 3.7 3.6 3.6 3.6 3.6 3.6	342 400 395 395 417 394 406 441 415 406 472 402	2 13 15 28 28 31 10 14 7 6 5	11655 12140 11387 11314 11279 11023 10878 11467 11067 11622 11802 12005	423 448 414 422 417 399 400 429 428 457 455 436	4 17 12 6 6 5	9573 10559 11339 11133 11632 11441 12693	344 359 419 417 440 437 461
4014 <i>t</i> 5	5 19	30	10655	3.7	391	1952 1953 1954 1955 1956 1957 1958 1959 1960	1 3 2 1 5 7	14920 14750 10053 9665 10360 8788 11561 11161 10030	3.8 3.9 3.6 3.6 3.6 3.5	592 562 396 378 377 313 430 392 353	1 1 2 2 1 5 6 9	13480 13490 10745 9360 12700 10286 10927 11368 10800	498 478 408 374 465 391 413 417 364	1 1 4 6 7	13/01 13451 11151 11347 10835 11836 10126	493 469 411 430 403 437 346
902501	3	8	10833	3.2	343	1955 1957 1958 1959 1960	1 1 1 3 2	13040 8380 11850 10917 10460	3.2 3.0 3.2	400 265 354 347 314	1 1 1 2 1	8950 7600 10120 11675 3720	329 295 384 437 336	1 1 1	7336 8437 9690 10976 10126	200 305 347 413 373
902551	1	2	8935	3.7	333	1953 1954	1	818u 9690		2 7 9 386		11040 10760	410 417	1	10900	388
90∠∀15	9	14	10101	3.8	380	1954 1955 1957 1958 1959 1960		8040	3.7 3.7 3.7 3.6	344 570 295 337 384 486		10320 10360 3600 10870 11766 13380	400	1 1 1 2 4 2	8437 10715 8589 10334 11859	332 442
903193	3 1	1	14990	3.7	549	1959	1	14990	3.1	549	1	9750	376	1	12154	456
9037 60) 4	9	13660	3.7	499	1955 1956 1957 1958 1959		13130	3.6 3.6 3.6		1 1 2 2 3	11530 11780 10715 12015 12967		1 1 1 2 2	11598 12699 11652 11500 12746	455 456
¥03537	7 5	6	13 883	3.4	468	1958 1959	l s	13660 14010	3.1 3.4	512 4/5	1 5	13770 12224	509 448	1 5	1196B 12260	4.15 460
90588	7 2	2	10925	3.6	385	1955 1959	1	7830 14020	3.7	307 463	1	14∠∋0 13230	537 528	1	14661 15325	545 564
904220) 1	1	18710	5.4	643	1959	1	18710	3.4	υ 4 3	1	15560	606	1	15107	54 ?
404a78	3 55	142	11054	j.7	402	1949 1950 1951 1952 1955	21 21 25 26	10779 12465	3.9 3.7 3.0 3.6	397 443	23 17	12616		7	10568	373

TABLE 15.--DAUGHTLA-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	UAUGHIER	AVERAGE	BA 211	K E		K	ECORD AV	ERAGE E	Y SIR	E BY	FRESHENING	YEAR				
SIRc NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECURDS NO.	L8.		FAT LB.	DOS-DAY RECORDS NO.			YLARLY H RECORDS NO.	MILK	
						1954 1955 1956 1957 1958 1959	HOLS 21 17 6 3 1	TEIN 12533 12670 11320 11473 12800 1100	3.0 3.5 3.6 3.3 3.7 2.6	449 444 402 377 471 29	21 17 5 3 1	11673 11902 9784 10297 12660 9760	440 444 383 372 446 356	18 17 6 2 1	11352 11371 10962 8867 12295 11946	418 432 422 310 448 448
90456	1 1075	2072	10646	3.8	401	1952 1953 1954 1955 1956 1957 1958 1959	24 146 301 415 320 295 267 239 65	10623 10176 10674 11020 10881 10893 11376 11493 11339	3.8 3.8 3.8 3.7 3.7 3.8 3.8 3.8	406 382 402 418 408 408 427 432	11 139 289 407 312 290 238 237 65	11437 11148 11251 11441 11045 11144 11375 11345 10894	#16 #07 #18 #29 #12 #14 #25 #25	33 251 345 282 240 222 219 62	10679 10669 11141 11325 11199 11627 11942 11929	396 397 413 426 416 432 447 451
90439	1 2	5	12069	3.4	412	1955 1956 1957 1959 1960	i 1 1 1	10530 12790 9960 13180 12910	3.3 3.6 3.4 3.5 3.3	347 455 341 455 430		13330 13280 15170 10970 10700	430 485 610 390 361	1	11674 11805 11183 11619	417 448 411 410
905683	3 22	31	11979	3.8	457	1956 1957 1958 1959 1960	1 2 10 15 3	6640 13035 12793 12123 14327	4.1 3.7 3.8 3.8 3.7	271 483 483 464 536	1 2 9 15 3	10780 12335 11719 11387 12160	421 451 439 420 452	1 2 8 12 3	12873 12246 12329 12588 12233	471 460 457 465 453
905691	2	2	11320	3.7	423	1959	2	11320	3.7	423	2	12330	455	1	11859	435
905995	2	2	11435	3.8	436	1958	2	11435	3.6	436	2	11320	450	2	10682	434
906006) 192	386	10957	3.9	420	1953 1954 1955 1956 1957 1958 1959 1960	6 25 45 39 59 71 109 32	10620 11315 11347 11156 11412 11021 11530 10553	3.9	430 448 447 434 442 423 436 398	6 25 43 38 59 67 108 31	12653 12306 11983 12439 12311 11899 12015 11517	460 462 452 471 462 450 449 432	3 21 39 34 54 62 103 31	12433 11907 12183 12438 11700 11995 12393 12346	453 433 458 474 443 451 464 465
90787.	3 1	1	8280	3.3	275	1954	1	8280	3.3	275	1	10120	357			
908242	2 1	4	15200	3.4	508	1949 1950 1951 1952	i 1 1	14130 16400 16620 13650	3.4 3.5 3.4 3.1	478 570 557 427						
908310) I	1	17370	3.9	677	1958	1	17370	3.9	677	1	12850	464	1	12829	479
90907	7 1	4	11685	3.7	437	1955 1956 1957 1958	i 1 1	11930 12680 11560 10570		459 481 421 387	1 1 1	12910 12810 12460 11970	455 469 461 458	1 1 1	11750 12306 10584	441 468 400
904229	1432	2563	11394	3.7	420	1954 1955 1956 1957 1958 1959	9 222 268 425 636 773 230	12726 11834 11404 11262 11499 11826 11619	3.8 3.7 3.7 3.7 3.7 3.6 3.6	477 437 418 415 425 431 424	9 221 260 421 585 772 226	11994 12098 11868 12111 11940 12147 12116	439 445 437 450 444 450 451	8 191 251 393 520 753 221	11773 12554 12266 11941 12552 12732 13006	424 456 453 442 466 472 487
909431	4 57	105	10905	3.7	407	1955 1956 1957 1958 1959 1960		10245 10518 10907 11867 12495 14583	3.6 3.6		21	12577 11947 11615 11710 11820 11615			11681 12281 11284 12438 12792 13881	
9100∠	7 1	3	9027	4.2	377	1958 1959 1960	1 1 1	9810 9550 7720		405 395 332	}	11430 11370 7030	426	1	10693 11576 11194	434
91002	9 1	3	13160	3.7	484	1953 1955 1956	1	13620 12810 13050	3.8	515 482 454	1	8140 9970 9590	425		10017 9134	
91063	0 4	5	9708	4+1	396	1956 1957 1958 1959	1 2	11730 9230 8440 10840	3.8 3.8	479 347 320 501	1 2	12620 9160 8215 10780	338 289			377 453
91077	4 21	37	11884	3.8	440	1954 1955 1956 1957 1958 1959 1960	2 3 7	8870 10916 11045 13277 12186 12868 12311	3.8 3.9 3.7 3.7	429 488 448 4 7 0	1 2 6 10	9060 10493 14210 13710 12397 11317 11706	403 519 518 454 437	1 2	11648 12295 12301 12797 12792	457 465 474 462
91082	в 1	3	9537	3.5	333	1957 1958 1959	1 1 1	10260 7470 10880	3.5			10480 8850	373 331		10475 10453	379 384
91181	0 6	12	9555	3.6	351	1948 1949	2		3.8 3.1							

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREGUING ORGANIZATIONS--GROUPED BY BROED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECOKOS		TEST PCT.	FAT L8.	FKESH YEAR	RECUKOS NO.	MILK L8.	TEST PCT.	FAT LB.	JOS-DAY KLCURDS NO.			YEAKLY H RECORDS NO.		
						1950 1954 1955 1956 1957 1958 1959	HOLS: 1 1 1 1 1 1	7040 6890 14690 13640 14550 16560 18070 16390	3.6 3.1 3.7 3.8 3.7 3.8 3.9 3.9	255 210 553 529 536 632 698 625	1 1	10450 12980 12800 13670 14470 15370	423 465 461 501 561 568	1 1	13222 13305 14323 15761	472 461 548 605
91184	1 1	3	8603	3.6	310	1954 1955 1956	 	7070 9040 9940	3.6 3.5 3.7	251 316 364	1 1 1	10360 9700 11440	374 359 4 1 9	1	7957 10311	312 3//
91170	1 274	581	10756	3.9	415	1952 1953 1954 1955 1956 1957 1958 1959 1960	38 66 89 99 73 76 58 67	10478 10471 10791 10960 11057 10688 11572 11565 11115	3.9 3.9 3.9 3.9 3.8 3.6 3.0	410 407 418 424 425 405 437 436 411	25 64 85 95 71 76 51 67	11707 11397 11543 11500 11300 11353 11741 11895 11609	450 425 435 436 426 421 436 441 422	18 78 93 66 73 48 61	10831 11357 11289 11412 11034 11870 11925 12273	411 422 426 432 420 442 442
91228	0 1	1	18120	3.9	711	1959	1	18120	3.9	711	1	13170	511	1	14693	552
91335	6 2	2	10915	3.8	412	1959 1960	1	12480 9350	4.0 3.5	496 327	1	12860 8870	511 33∠	1	11118	4/3
91358	1 3	7	11419	3.6	412	1949 1950 1953 1955 1956 1958	1 1 1 1 2	8140 13090 12060 10040 11550 11685	3.5 3.6 3.3 3.7 4.1 3.6	286 472 595 373 472 423	1 1 1 1 2	12630 12920 12510 12660 14525	435 453 434 458 549	1 2	12415 12786	457 468
91343	2 101	37 7	11702	3.9	456	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	28 59 59 56 44 35 35 26 15 12	12015 12205 11780 11928 11592 11424 11818 12609 12677 12347 9790 9815	3. 9 3. 8 3. 8 3. 9 4. 0 4. 1 4. 0 3. 9 4. 1 3. 9	463 471 458 458 453 449 471 513 502 483 389 382	4 20 22 31 34 36 33 25 15 12 5	13868 11762 11451 11461 11499 11191 11551 12073 12289 11372 12932 9900	499 429 423 422 431 415 427 458 469 454 497 385	11 32 25 14 12 5	11470 11206 11615 12835 12199 12470 11075	446 4:5 441 472 457 504 416
91398	8 1423	2491	11126	4.2	464	1954 1955 1956 1957 1958 1959	14 118 160 349 680 937 233	10504 11290 11062 11027 11289 11321 11194	4 • 1 4 • 2 4 • 2 4 • 2 4 • 2 4 • 1	424 471 459 462 472 473 460	14 112 155 336 614 929 219	11928 11696 11645 11411 11533 11501 11527	446 447 445 440 446 443	11 99 149 237 551 849 228	11397 11696 11786 11351 11217 12086 12210	423 444 455 461 461 469
91875	6 1	2	13480	3.5	465	1958 1959	1	13940 13020	3.0 3.3	496 434	1	11o00 121o0	514 498	1	11336 12110	468 508
91960	8 69	138	12023	3.8	454	1953 1954 1955 1956 1957 1958 1959 1960	1 6 16 15 33 31 27	15590 12487 11697 11800 11777 12384 12184 11670	3.4 3.7 3.9 3.1 3.0 3.8 3.8 3.7	537 471 457 438 445 468 458 458	1 7 16 15 33 26 27 8	8750 11346 11293 11325 11361 11632 11653 11324	346 426 433 430 432 435 436 426	6 16 14 26 22 26 8	10330 11478 11933 11591 11842 12368 12674	305 431 454 436 445 459 480
92086	9 1	4	14035	3.4	474	1952 1953 1956 1957	1 1 1	11370 13480 14660 16630	3.5 3.1	467	1 1 1	11200 13070 13660 13640	460		12372 13876	
92087	1 1	2	8810	3.8	334	1954 1955	1	8780 8840	3.8 3.8	334 334	1	6850 8400	267 297			
92142	6 2	5	13799	3.7	509	1951 1952 1954	2 2	14730 13130 12670	3.9 3.6 3.8	563 475 484	1	11430 12030 10840	489 458 419	1	11707	422
92228	7 1	6	10618	3.5	367	1950 1951 1952 1953 1954 1955	1 1 1 1 1	11020 9400 11090	3.6 3.9 3.3 3.4 3.5 3.1	39 1 364 364 383	1 1 1 1 1	12130 10110 12670 11130 9130	457 3 7 4 460	1	11816	451
92228	8 4	6	13238	3.9	504	1958 1959	1 4		ა. ს 3. ს	412	1 4		473	1 4	13941 14186	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY ERLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRL

											I KESHENI 10					
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECUROS NO.		TEST PCT.		AECURUS RECURUS			RECORDS NO.	MILK	
						1960	HOLS	TEIN 14790	4.0	506	1	11750	426	1	12350	463
92331	8 4	7	13295	3.5	471	1954 1955 1957	2 1	11905 10670 12790	3.5 3.9 3.3	420 419 428	2 1 1	10050 8460 8160	394 344 300		9984 9047	422 335
						1958 1959	1 2	18720 11125	3.6	3/3	2	8200	306	2	8426	307
92374	9 1	1	13190	3.6	478	1953	1	13190	5.6	4/8	1	11510	438			
923750	0 2	2	11320	4.0	452	1953 1958	1	12050 10590	3.8 4.≥	462 441	1	120 წ0 124 30	446 474	1	11630	440
92409	7 2	2	10325	3.7	380	1958 1959	1	8920 11 7 30	3.8	336 424	1	11330	41,	1	12960	475
92425	7 1	1	5170	4.0	208	1959	1	5170	4.0	200	1	10300	376			
924561	4 9	20	13437	3.1	497	1950 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 2 2 1 2 1 3 4	15800 16165 19640 16630 1390; 14565 11360 12687 13370 10575	3.6 3.9 3.9 4.0 4.0 3.9 3.3 3.4 3.7 4.0	574 625 701 664 582 579 573 435 487 419	1 1 1 2 2 4 2 4	12740 12550 14310 12640 11370 11520 10770 12260 11895 8810	422 421 481 455 416 434 366 453 425 329	1 1 2 1 2 3 2	12252 11532 12535 14246 12748 12847 13652	441 409 452 508 456 464 491
925391	+ 1	1	6860	3.9	261	1959	1	6860	3.9	261	1	12540	45)	1	13233	491
925396	6 1	2	10015	3.6	355	1952 1953	1	12980 7050	3.6 3.5	46 I 248	1	11400 10250	1469 415			
925778	18 8	227	10598	4.0	417	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 14 30 37 38 35 29 18 10 5	8875 10749 10437 10434 10768 10829 11404 11825 12263 12678 12553 12678	4.2 4.0 4.0 3.9 4.0 3.9 4.0 5.7 3.4 5.7	369 429 415 408 427 440 467 453 428 462 493	8 14 19 30 32 27 18 10 5	13376 12090 11420 11792 11308 11922 12313 12880 11370 12023 12136	473 433 410 437 411 442 468 467 419 443 453	9 26 18 9 4 4	11342 11297 11868 12861 11497 12197 12996	418 423 441 450 429 459 469
926102	2 1	3	11773	3.6	422	1957 1958 1959	 	11120 12260 11940	3.5 3.5 3.5	410 431 424						
92/ 829	9 45	153	11645	3.7	431	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 12 26 26 16 15 14 11 10 7	11455 11970 11464 12519 12721 11496 10891 11248 12243 12191 13698	3. / 3. 7 3. 7 3. 8 3. 0 5. 8 3. 7 3. 8 3. 8 3. 6	420 444 421 471 488 434 416 420 469 462 498	4 12	12120 13880 12021 12161 11982 11875 11397 10776 11807 12877 12463	426 518 438 443 435 436 416 397 432 478 466	4 13 13 11 10 7 5	11244 12238 11323 11628 11893 12831 13405	415 450 419 429 445 416 508
928949	309	621	11191	3.9	432	1953 1954 1955 1956 1957 1958 1959	13 99 114 72 77 107 112 27	9911 10515 11354 11337 11332 11705 11999 11394	3.9	375 404 441 437 443 450 463 437	74 99	11306 11374 11966 11934 11982 12278 12255 11866	462	67 86	10982 11231 11502 12399 11851 12388 12577 12801	475
92916	1 665	1136	10951	3.8	413	1955 1956 1957 1958 1959 1960	39 96 171 313 418 99	11312 10724 10561 11300 11125 10771	3.7	432 406 392 424 422 410	167 288 417	11821 11315 10992 11502 11576 11042	444 424 412 432 436 414	32 90 141 274 398 96	11780 12077 10815 11670 12018 12149	415 437
929445	5 3	10	11744	3.7	434	1951 1953 1954 1955 1957 1958 1959	1 1 2 2 1 1	10660 10750 11435 14570 12460 13910 14100 14796			1 2 2 1 1 1	13790 11785 10785 14110 13530 11870 10550	437 438 423 524 513 435 358	1 2 1 1 1	11816 11881 12644 13625 12818 13135	480 495 477
92979	1 1	3	9170	4.1	377	1950 1951 1952	1	11260 6660 9590	4.0 4.1 4.3	450 273 409	 	11640 12560 11330	412 451 432			
729962	2 28	40	13030	3.7	478	1954 1955 1957 1958	1 3 4 9	13360 15920 10780 13484	3.7 4.0 3.8 3.6		L _k	12810 13370 11053 12611	408	1 3 4 6	11598 13650 11219 12829	422

PENNS YL VAN1A

TABLE 15.--GAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS-GROUPED BY BREED,
BY YEAR OF FRESHENING-RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-0AY RECORUS NO.	CONTEMP MILK LB.	FAT LB.	YEARLY HE RECORDS NO.		
						1959 1960	HOLS 18 5	TEIN 13127 12638	3.6 3.7	472 464	17 4	12242 10808	453 409	14 5	13295 11740	494
93069	2 1	1	11730	3.1	366	1960	1	11730	3.1	366	1	11510	442	1	12579	480
93115	9 55	171	10903	3.9	417	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	5 16 27 30 23 21 15 12 9 5 6	12534 10846 11479 11341 11196 11565 12439 10832 12027 11502 13118 5905	3.7 3.9 3.8 3.9 3.6 3.6 3.6 3.7 3.6	454 418 432 440 422 424 451 406 421 444 492 220	9 16 20 20 21 15 12 9 5 6	12033 11031 11444 11196 11361 11884 11814 11686 12306 11783	455 405 429 414 412 436 427 426 452 434	7 21 14 12 7 5 5	9967 11511 10897 11016 11353 12731 12245 14574	3/1 4/2 40/2 41/3 40/8 45/8 44/7 52/1
93319	9 2	2	10710	3.6	377	1954 1958	1	12720 8700	3.2 4.0	405 349	1 1	11900 11010	415 377	1	12055	421
93324	8 I	1	12330	3.7	457	1959	1	12330	3.7	457	1	9700	345			
93335	7 368	863	12004	3.7	439	1951 1952 1953 1954 1955 1956 1957 1958 1959	9 76 102 111 149 109 92 103 89 23	11050 12085 12044 11524 12252 11853 12494 12546 13064 13724	3.5 3.7 3.7 3.7 3.7 3.7 3.6 3.7	391 442 439 425 448 437 458 455 475	5 52 93 108 149 103 92 95 89 23	10888 11603 11019 11006 11924 11527 11890 11637 12154 10744	415 431 408 414 445 423 440 432 448 404	18 99 139 99 88 88 86 22	10523 11186 11648 12161 11704 12160 12643 12610	398 415 431 453 438 452 467 472
9339 5	0 17	43	10839	3.7	401	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 1 2 4 3 6 7 5	11460 10950 10715 11703 12927 9788 10874 10694 11325 10273	3.8 4.0 3.8 3.9 4.0 3.7 3.9 3.8 3.6 3.5	433 439 404 460 522 363 424 407 407 362	1 1 2 4 3 5 6 3 11	9810 10660 9635 10983 10017 10004 10232 11487 11630 12263	312 403 360 408 399 364 384 427 437 482	3 2 3 5 3 11 3	9639 9996 10707 10054 11074 11603	375 411 403 383 415 437 458
93402	1 2	2	8035	3.6	295	1959 1960	1	9790 6280	3.8 3.4	374 216	1	9570 12230	354 444	1	15238	548
93485	1 149	379	10985	3.8	416	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	16 36 41 58 70 52 42 25 20 9	11504 11216 10096 11685 11429 11496 12570 11832 10599 10937 12333 11460	3.8 3.9 3.8 3.8 3.8 3.8 3.8 3.8 3.8	437 432 378 448 431 441 486 444 401 398 479 520	2 10 21 38 66 50 42 26 20 8	12265 11564 10931 11556 10941 11560 11975 11765 11463 10935 11739 9280	402 446 396 428 407 428 447 432 435 417 455 385	16 42 35 20 15 7 5	11041 11243 11446 12201 11890 11053 13551 10235	411 422 430 457 446 424 512 420
93593	3 1	1	14490	3.9	567	1959	1	14490	3.9	567	1	11070	414	1	12034	462
93605	5 15	28	11442	3.9	446	1955 1956 1957 1958 1959 1960	7 4 6 4 6	11439 10403 10898 12198 13418 11710	3.9 3.9 3.9	461 411 420 482 514 476	7 4 6 3 6	10893 11320 11032 11367 11762 12040	412 407 411 439 458 475	6 4 5 3 5	11614 11764 11504 12066 12254 10889	435 427 422 439 468 451
93671	6 7	19	12250	3.4	416	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 1 1 2 2 2 3 3 2 1 2	12500 12880 11860 16775 14795 13135 12980 12205 15290 11320 11290	3.2 3.0 3.7 3.4 3.6 3.4 3.6 3.8 3.3	403 392 438 536 531 441 446 434 585 375 352	1 1 1 2 2 2 2 3 2 1	15430 15330 11850 12460 11200 13040 12280 12105 12350	566 594 411 464 424 461 455 445	2 3 2 1	11560 10915 11734 12001	416 398 434 433
93772	0 244	653	11720	3.5	409	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	17 43 54 61 73 113 101 57 53	11918 11183 11249 12276 12509 12404 12158 11789 12078 12225	3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	413 387 387 425 431 432 422 411 422 425	6 18 35 43 60 110 101 55 53 32	12538 12493 12029 12439 12224 12513 12381 12397 12115 11797	447 445 432 451 438 449 451 452 445 445	18 101 92 54 46 28	12011 12061 12409 12430 12432 12268	426 435 446 450 454 448

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	DAUGHTER	AVERAGE				8			BY SIR	E BY	FRE SHENI NG	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LE.	305-DAY RECORDS NO.			YEARLY HI RECOROS NO.	MILK	
						1959 1960	HOLS 36 11	TEIN 12794 11751		441 421	36 11	12509 11084	454 419	36 11	12976 12466	474 462
93803	4 13	24	11445	3.6	411	1955 1956 1957 1958 1959	1 1 3 5 9	13930 6940 10160 15264 10628 10770	3.9 4.3 3.7 3.5 3.6 3.6	540 295 385 531 387 385	1 1 3 5 8 5	12120 5830 9960 12616 12154 11486	490 261 396 461 454 430	1 1 2 3 7 5	13222 7576 10192 13345 11993 11826	484 322 391 500 452 440
938082	2 4	6	9736	3.7	353	1957 1958 1959 1960	1 3 1 1	5990 10157 10370 8990	4.7 3.8 3.6 3.5	284 371 375 314	1 3 1	10290 9753 10410 9550	361 348 352 357	1 3 1 1	6529 10896 9352 10181	310 386 324 382
938242	2 102	288	10395	3.8	396	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	2 16 37 48 52 37 35 27 13 10 8	7780 11334 11074 10436 10848 10592 11333 11290 11484 10905 11245	3.8 3.8 4.0 3.9 3.9 4.0 3.8 3.8	281 431 420 396 426 412 440 449 433 424 426 397	5 12 22 27 31 33 24 12 9 5	12792 11819 11514 12049 11122 11523 11830 11800 11666 10808 10705	472 427 415 437 405 423 440 436 419 400 386	8 29 20 13 9 4 2	11100 11064 11587 11851 11427 10941 11135	404 408 434 447 427 404 395
938770	0 3	5	15877	3.4	538	1957 1959 1960	1 2 2	12580 17220 17830	3.6 3.4 3.3	452 579 584	1 2 2	9550 12280 11335	353 471 414	1 2 2	10420 12699 13582	398 473 500
939071	+ 1	1	12800	3.6	455	1954	1	12800	3.6	455	1	15330	561	1	12906	473
939765	5 1056	2268	11383	3.8	421	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 63 96 128 167 234 246 219 262 321 391 130	11114 11178 11531 11191 10932 11291 11850 11350 11417 11637 12033 12047	3.7 3.8 3.7 3.6 3.8 3.8 3.8 3.8 3.8	430 410 431 420 406 423 446 424 426 435 452	1 14 47 87 151 225 244 214 257 304 389	10910 12914 11874 11573 11180 11438 11745 11609 11731 11829 12055	438 478 438 435 415 428 440 432 433 435 445	34 206 222 199 239 285 372 128	11010 11408 11492 11908 11468 12178 12357 12678	420 421 430 446 432 455 458 469
94042	lş 1ş	10	9748	3.4	338	1954 1955 1956 1957 1958 1959	1 1 1 2 3 1	12980 9990 13550 17810 14405 12513 2690	3.5 3.7 3.7 3.4	459 362 476 661 536 439	1 1 1 1 2 3	12800 13080 13040 14880 13290 11943	468 476 471 550 498 444	1 1 1 2 3	12066 12404 12437 13342 13385 13345	438 447 449 486 499
941567	7 65	154	11155	3.7	417	1953 1954 1955 1956 1957 1958 1959	5 22 31 22 26 22 25	10702 11178 11206 11595 10943 11817 12329 11330	3.8 3.7 3.8 3.7 3.7	388 419 418 436 406 441 448	5 22 29 21 26 17 25	10932 11635 11839 11677 11898 11473 12151	402 429 442 440 446 430 461 468	22 28 22 22 15 24	10877 11954 11636 11248 12030 12506 13135	398 441 435 422 452 472 492
941/86	0 11	20	10478	3.6	375	1954 1955 1957 1958 1959 1960	2 3 6 5 1 3	12435 13090 9422 11004 4770 11727	3.7 3.6 3.5			11035 10880 11115 11185 9740 10977	409 390 397 405 330 396	2 3 5 4 1 3	10780 12008 11519 11587 9352 12611	381 445 420 427 324 466
94180	9 4	13	11834	3.8	##5	1949 1950 1951 1952 1953 1954 1955	1 2 3 3 1 1 1	7040 10805 11850 12670 10730 15630 13930 15340	3.9 3.8 4.1 3.8 3.3	287 404 453 483 439 593 453 522	1 1 2 1 1 1	7030 13090 9785 11720 10270 9930 9740 11500	362 476 432 455 383 402 390 427	1 1	10758 9712 11325	445 397 456
94329.	3 3	7	12587	3.3	418	1953 1954 1957 1959 1960	1 1 2 2 1	10360 12300 13290 12960 11680	3.3 3.4 3.2	411 406 444 415 360	1 1 2 2	9830 13530 10730 11240 11910	353 483 392 403 423	1 2 1	13004 11183 11619	451 411 410
94374	9 7	9	11482	3.8	426	1958 1959 1960	2 5 2	12200 12010 9715	3.8	453 448 340	2 4 2	11590 11563 10130	421 428 389	1 3 1	13080 11823 10867	472 435 402
94378	8 109	191	10316	3.8	394	1956 1957 1958	20 46 56	9701 9912 10803		367 376 416	20 44 53	10873 10742 11243	420 403 421	17 37 52	11337 10934 11415	437 409 431

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

378

DAUGHTER AVERAGE BY SIRE

				-							i ke silenino					
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-DAY (RECORDS NO.			YEARLY HI RECORDS ND.		FAT
						1959 1960	HDLS 53 16	TEIN 10405 10841	3.8 3.9	399 419	52 16	11203 11349	425 433	47 15	11852 12325	448 474
94379	9 3	4	9087	3.7	335	1955 1958	I S	12070 8893	4.1 3.7	491 324	2	9220	340	1	11510	417
94433	6 32	65	10267	3.7	379	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 24 17 9 3 2 2 1	9968 9804 10216 10968 13173 13805 11175 16010 18265	3.6 3.8 3.6 3.7 3.7 3.7 3.7 3.3	355 371 371 399 493 519 407 536 653	1 12 16 9 3 2 2 1	14020 11411 11163 11297 12087 14330 11670 12980 11825	530 414 411 407 468 545 435 489 439	5 7 3 2 1 1	11508 10556 12015 14339 6704 12568 12154	435 389 449 564 261 464 443
94460	6 724	1402	12276	3.7	450	1954 1955 1956 1957 1958 1959	6 140 194 274 336 363 89	11157 11971 11640 12063 12768 13050 12460	3.7 3.7 3.7 3.7 3.7 3.6 3.7	413 440 431 441 468 476 459	6 139 193 272 317 359 84	12228 12260 11869 11708 12091 12030 11903	467 462 448 439 453 452 457	6 129 178 251 277 329 81	12087 11621 12227 11604 12409 12817 12721	449 434 464 438 466 482 484
94613	2 1	2	8095	3.3	262	1957 1958	1	8350 7840	3.2 3.3	268 255	}	10150 10920	368 389	1	10333 11205	362 404
94625	0 767	1311	11539	3.8	435	1956 1957 1958 1959 1960	72 215 366 520 138	11149 11169 11747 11912 11312	3.7 3.8 3.8 3.8 3.7	414 419 445 449 417	71 208 351 517 134	11380 11117 11273 11464 10830	423 416 425 432 411	65 179 336 485 136	12038 11011 11413 12043 11757	
94696	1 619	1390	10694	3.8	402	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	19 68 132 181 181 179 183 125 117 92 91	12079 11093 10977 11047 10922 11004 11010 10612 10772 10896 10825 9709	3.8 3.8 3.8 3.7 3.8 3.8 3.7 3.8 3.8 3.7	454 426 411 414 408 419 414 398 403 406 407 355		12476 12093 11894 11932 11226 11166 11566 11246 11206 11417 11754 11188	447 442 445 416 418 436 420 418	53 158 160 114 102 78 88 21	11374 11159 11248 11808 10873 11826 12123 12508	415 422 443 410
94731	9 89	223	10889	3.7	403	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 34 52 41 27 20 20 15 9	8977 10315 10706 11538 11209 11351 11394 12481 12368 14840		345 385 398 429 417 420 421 454 461 565	2 25 44 39 27 20 20 14 9	10220 11468 11024 11558 11039 12175 11286 11705 10728 12600		13 33 25 20 16 13 8 2	10495 10914 11675 12080 11628 11893 12009 13097	410 438
94842	4 1	6	957 2	3.4	321	1952 1953 1954 1955 1958	1 1 1 2 1	9610 14020 9140 9890 4880	3.3 3.4 3.4 3.3 3.6	316 477 312 321 176	1 1 1 2	12240 14790 9970 10205 9590	431 549 397 373 347	1 2	10802 9592 9243	346
94909	4 29	81	11926	3.7	439	1952 1953 1954 1955 1956 1957 1958 1959		11765 11207 11285 11436 12423 13023 13426 11300 13430	3.6 3.9 3.7 3.6 3.6 3.8	428 416 409 442 458 467 486 429 527		11620 11678 12087 11745 12308 12668 13255 12663 12280	456 466 481 510	8	13898 11915 12424 12609 12324 12989 12955 12595	458 504
94915	9 72	101	I1224	3.5	387	1956 1957 1958 1959 1960	1 13 25 52 10	10100 11462 11363 11602 10 7 82	3.5 3.5 3.4	334 396 390 396 369	1 13 22 50 9	11160 12332 11806 11771 11989	402 445 429 444 441	1 11 19 45 8	11009 11169 12436 12014 12831	458 449
95031	4 1	2	12090	3.8	449	1954 1955	1	11780 12400	3.7 3.8	431 467	1 1	10070 11750	377 440	1	9625 10137	370 375
95064	8 1	ц	10760	3.4	363	1951 1953 1954 1955	1 1 1	10570 9510 12950 10010	3.4	352 320 437 344	 I 	11090 11840 13630 10070	391 415 489 373	1	10900	
95070	7 3	3	12733	3.8	485	1955 1959 1960	1 1 1	12820 13400 11980		456 513 486	1 1 1	9240 13730 8800	326 504 333	1	8905 9690	314 365
95 105	8 3	Ħ	13808	3.8	518	1955 1957 1959 1960	1 1	11840 7890 13330 18230	3.8 3.8	448 301 528 650	1 1	12760 11370 13170	501 438 490	1 1 I	10388 13178 12927	
95192	8 303	853	11380	3.8	429	1950 1951 1952 1953	39 119 152 167	11276 11077 11450 11881	3.8 3.7	426 416 426 446	12 54 96 146	12614 12441 12252 12298		34	11385	412

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

	DAUGHTER	AVERAGE	8Y S11	RE		R	ECORD AVE	RAGE	SY SIR	Е ВУ	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY RECORUS NO.			YEARLY H RLCOROS NO.	MILK	
						1954 1955 1956 1957 1958 1959		TETN 12190 12223 12169 11282 11839 12223 12125	3.8 3.8 3.9 3.9 3.9 3.7 4.0	464 466 473 440 461 457	112 103 52 40 30 21	12639 12456 12425 11737 12252 12156 10923	456 455 460 436 459 450 422	103 100 52 37 25 20	12268 12772 12450 11816 12597 13035 12312	446 465 461 440 474 483
952029	12	18	12659	3.6	452	1958 1959 1960	3 11 4	13843 12769 12233	3.5 3.5 3.7	483 450 460	3 11 4	12177 12158 10078	439 450 408	3 11 4	13320 12296 12448	431 446 489
952335	376	772	11464	3.7	427	1954 1955 1956 1957 1958 1959	96 134 92 127 151 139 33	11395 11721 11071 11395 11767 11919		421 440 413 426 435 444 438	95 133 90 126 137 138 31	11722 11892 11343 11655 11861 12006 11303	438 450 427 435 447 453 428	87 130 87 113 125 129 31	11369 11622 11880 11210 12190 12593 12517	420 433 450 429 458 476
952421	125	275	11142	3.7	413	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 7 26 32 39 46 37 19 11 25	11917 12274 10899 10900 11288 10891 11600 11685 11332 11756 13029 11943	3.8	416 464 410 404 420 407 429 435 419 437 460 425	12 20 35 42 37 17 15 22 15	11247 11337 11270 11135 11371 11183 11391 10764 11432 11258	412 413 415 411 432 417 428 403 424 429	4 37 32 16 16 18 13	10908 11155 10695 11707 11365 11735 12584 12604	4 1 2 4 1 0 3 9 8 4 3 3 4 2 8 4 3 4 4 7 1 4 7 1
953326	1	8	16458	3.5	568	1950 1951 1952 1953 1954 1956 1957	1 1 1 1 1 1	14400 14820 17760 15670 16030 16950 19940 16090	3.5 3.4 3.2 3.6 3.4 3.4 3.8	502 504 577 565 545 570 679 605	1 1 1 1 1 1	13500 13150 13940 12400 12670 12760 13750 13040	473 487 500 456 476 485 527 501	1 1 1	13102 13080 13908	483 493 528
954461	1	1	13890	3.8	533	1958	1	13890	3.0	533	1	13830	518	1	13658	512
954645	2	4	8794	3.6	316	1955 1957 1959 1960	1 1 1	7920 10310 8760 9930	3.3 3.9 3.7 3.7	264 407 327 369	1 1 1	9630 9040 9390 10430	317 309 321 353	1 1 1	9145 9178 9352 10126	310 324 346
955467	333	498	10785	5.7	396	1954 1955 1956 1957 1958 1959	1 32 28 45 113 213 66	9380 11013 10681 11301 11111 10922 10855	3.7	311 411 392 415 408 401 399	1 32 27 44 111 213 64	10830 11780 10801 11429 11882 11739	395 453 410 426 440 433 434	1 27 25 39 95 199 62	10333 11842 11216 11074 12315 12190 13011	375 448 425 416 459 482
955493	450	810	11417	3.8	429	1953 1954 1955 1956 1957 1958 1959	3 23 63 76 140 198 231 76	10910 12203 11525 11320 11169 11707 12212 11976	3.8 3.8 3.7 3.6 3.8	404 465 436 429 414 443 458 443	3 23 65 72 136 177 231 75	12853 12214 12300 11609 11710 12115 12143 12337	461 458 461 436 439 456 456 459	2 19 48 67 104 164 214 73	13811 11920 12141 12160 11388 12251 12643 12812	481 439 456 456 463 471 480
9556 19	13	21	12236	3.6	436	1955 1956 1957 1958 1959 1960	3 1 2 6 7 2	11260 9120 12485 14788 12504 12200	3.3 3.5 3.8 3.6 3.7 3.8	3/3 320 469 540 460 455	3 2 6 7 2	9520 12535 12718 11931 13915	358 470 472 446 520	3 1 2 5 7 2	9505 10246 10655 12845 12895 14765	342 371 391 478 478 553
956081	30	37	12275	3.6	441	1956 1957 1958 1959 1960	1 2 11 22 1	10100 12310 13228 12251 9240	3.2 3.4 3.6 3.6 3.9	327 411 479 440 360	1 2 11 22 1	10o40 11865 11235 11626 9530	362 444 418 439 354	1 1 8 20 1	10279 15293 11539 12355 10181	346 545 431 460 302
957208	228	533	11245	3.7	413	1949 1950 1951 1952 4953 1954 1955 1956 1957 1958 1959	17 48 57 70 70 70 78 43 30 24 24	12466 11299 10863 11772 11396 11873 11504 11579 11425 11303 11476 8320	3.5 3.8 3.7 3.7 3.7 3.7 3.7 3.6 3.5	445 428 405 434 422 438 426 424 410 399 409 291	4 18 27 46 61 68 72 42 30 22 24	11645 11826 11652 11037 10922 11003 11095 10946 10740 10881 11798 6875	417 441 416 411 416 419 408 395 402 440 273	19 62 63 38 25 22 24	10900 10706 11046 11736 10957 11245 12372 11396	402 403 413 442 408 416 46

TABLE 15.--OAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

											701 014	CONTRA	***	W(\$3) W 111	COD AND	2425
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.	LB.	TEST PCT.		RECORDS NO.	MILK	FAT LB.	RECORDS NO.		FAI
057111		,	10707	7 0	. 70											
957416	5 4	6	12753	3.8	475	1951 1952 1953 1954 1955 1959	1 1 1 1 1	14070 11060 11340 15330 11010 14130	3.5 3.7 3.8 3.4 4.3 3.5	496 414 427 523 476 491	1	14210 14410 14240 14300 14490 13940	542 516 521 501 523 533	1 1 1	12971 12699 13636	474 455 5 28
958782	2 77	201	11675	3.5	413	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	9 42 35 26 15 11 8 8	10368 11789 11953 12591 13125 12975 13224 13989 12941 15655	3.5 3.5 3.6 3.5 3.6 3.5 3.6 3.5 3.4	368 410 426 444 479 459 477 500 448 527		12735 11607 12185 12067 12480 12477 12236 12142 11768 12095	457 431 445 449 480 477 476 465 439 446	13 28 25 14 9 5 8 2	12109 11985 12175 12551 11819 12598 12547 12895	443 447 457 479 447 440 467
959002	2 28	86	10509	3.9	405	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 18 15 9 10 10 7 5 2 3	880 1 957 0 1127 5 1066 2 1087 1 1159 6 1282 1 1146 2 1227 0 1215 7	4.0 4.0 3.9 3.8 3.9 3.6 3.6 3.6 3.7	351 380 438 409 424 438 460 414 454	5 10 9 4 10 10 7 2 3	11858 11963 11163 11267 11027 11835 11079 10122 10825 11107	436 446 412 414 412 450 423 380 395 405	5 10 10 7 5 2 3	10623 10832 10918 11784 9653 12274 11928	393 401 418 452 366 447 436
95912	1 430	735	11116	3.9	437	1956 1957 1958 1959 1960	13 161 200 281 80	9967 10766 11491 11350 11319	4.0 4.0 4.0 4.0	396 423 453 448 435	13 160 178 279 75	11188 11950 11937 11796 11786	451 460 461 455 451	11 116 165 258 75	11471 11692 12268 12390 12537	459 456 476 479 487
960618	3 2	ц	13002	3.6	461	1956 1957 1958 1959	1 1 1 1	12860 12260 14760 12710	3.8 3.8 3.8 3.5	486 469 561 416	1 1 1	11260 9860 11260 10200	405 347 408 378	1 1 1 1	11565 11423 10475 11478	420 426 375 422
961493	3 413	596	11550	4.2	479	1957 1958 1959 1960	41 137 328 90	11023 11732 11575 11848	4.2 4.2 4.2 4.1	458 492 479 488	40 136 326 89	12322 12348 12281 12014	465 472 463 454	35 128 303 87	12484 12496 12736 13036	474 477 484 496
963422	2 6	10	12018	3.7	447	1955 1958 1959 1960	1 4 4 1	18390 10125 10385 14210	4.0 3.4 3.7 3.8	729 344 382 540	1 4 4 1	16590 10665 10718 9500	62 1 37 4 36 7 35 1	1 2 4 1	14017 11298 11835 10519	554 391 428 386
963941	7 2	5	9981	3.7	358	1957 1958 1959	2 2 1	10185 10190 10140	3.7 3.7 3.2	370 366 322	2 2 1	8995 9715 11060	335 342 385	2 1 1	10410 11946 12263	384 420 426
964599	6	14	11863	3.5	408	1955 1956 1957 1958 1959 1960	1 5 3 . 3	9490 9920 11336 11657 12437 6060	3.3 3.4 3.5 3.4 3.4	313 333 391 397 424 184	3 3	10990 10350 13294 11023 11043	388 370 485 401 394	1 1 4 3 3 1	11685 10900 11843 11776 12234 12546	437 366 421 420 440 438
96555	1 3	17	11669	4.0	461	1951 1952 1953 1954 1955 1956 1957	2	11485 12603	4.0 3.9 4.1 3.8 3.9		3 3 2	12167 10960		2	10072 11445 12048 11339 10835 11674	373 436 476 456 421 450
96647	D ft	7	11452	3.6	414	1956 1957 1958 1959	1 1 1	11995 11550 16400 15440	3.9 3.8 3.5	471 454 618 542	1	13930 13200	528 501	1	13320 14541	491 560
					-	1960	2	9020		306	2	7115	254	2	10889	307
96661						1952	2	10910		348	2	13925	513		13:50	
96701		19	10994			1958 1959 1960	14 3	10815 10706 10300	3.8 3.9	436 402 406	14	14795 12046 9863	384	14	13658 12993 11478	475 436
96740	5 1	2	14265	3.9	554	1958 1959	1	12260 16270	3.8 3.9	471 636	1	10260 11550	436 494	1	11173	
96787.	3 34	41	12549	3.7	454	1958 1959 1960	8 25 8	13656 12054 13490	3.5 3.7 3.6	477 440 486	7 25 8	12254 11544 11869	454 430 436		12066 11814 12680	
96854	4 1	1	7400	4.5	330	1959	1	7400	4.5	330	1	11310	447	1	12023	460
96921	1 78	191	10829	3.8	407	1950 1951 1952 1953 1954	8 13 31 47 30	11201 10732 10678 11247 11656	3.8 3.8	416 417 402 423 439	43	12840 12297 11530 11049 11223		22 26	11278 11074	

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	PECURDS NO.	MILK L8.	TEST PCT.	FAT LO.	305-0AY RECORUS			YEARLY H RECORDS NO.	ÉRU AVE MILK LB.	RASE FAT Lo.
						1955 1956 1957 1958 1959 1960	HOLS 21 19 8 6 7	TEIN 11760 11761 11951 11190 10783 10430	3.9 3.8 3.7 3.6 3.7	454 453 448 416 361 385	19 17 4 4 1	11114 11186 12626 11825 11203 9560	432 439 490 455 427 384	19 17 6 3 7	11245 11381 12668 11895 11471 10039	434 443 500 462 435 343
96966	7 220	375	11946	3.9	459	1953 1954 1955 1956 1957 1958 1959	1 12 39 31 52 79 131	11670 12035 12019 11920 11264 11740 12795 12100	3.5 3.9 3.8 4.0 3.9 4.0 3.9	460 441 464 467 464 464 464 464 464 464 464	1 12 39 31 50 76 131	14260 11713 11674 12228 11156 11604 12180 11227	493 444 435 463 415 438 454 420	12 35 30 38 70 126 29	11786 11983 11965 11779 12049 12626 12635	478 440 449 453 473 478
96966) 44	212	12177	3.8	460	1953 1954 1955 1956 1757 1958 1959	10 12 17 43 95 30	13250 13563 11671 11776 12205 12247 12319 11543	3.9 3.8 4.6 3.7 3.7 3.6 3.7	522 510 469 445 452 466 464 439	1 3 10 12 17 40 95 28	12200 12300 12110 11129 110d3 11714 11d16 116o3	460 467 462 427 423 445 445 445	1 3 9 11 12 36 69 29	12720 11623 12647 11615 11474 12282 12366 12399	474 440 481 438 438 464 464
969897	7 1	1	11210	4.3	485	1955	1	11210	4.3	485						
972712		1	17020	3.6	610	1958	1	17020	3.6	016	1	13690	492	1	12764	457
973635	5 . 31	92	10634	3.6	384	1950 1951 1952 1953 1954 1955 1956 1957	6 16 16 10 13 11 3 4	10882 10964 12166 11156 11116 12190 11748 10850 15190	3.6 3.6 3.7 3.6 3.5 3.5 3.4 3.4	369 392 431 409 398 429 414 368 518	4 9 10 14 12 11 8 4 2	12478 11720 12245 11450 10984 11059 10723 10618 12375	445 425 443 418 392 407 386 390 451	12 11 8 4 2	11547 10315 11283 10472 11821	410 372 407 378 422
47 4 771	11	13	11320	3.7	424	1958 1957 1960	7 1	9990 12329 11230	3.9 3.7 3.5	388 464 398	4 7 1	11840 11900 6900	438 434 283	4 6 1	11371 12426 10257	413 469 378
975137	7	13	9751	3.7	360	1957 1958 1959	2 6 5	9605 971 8646	3.7 3.6 3.7	347 365 313	2 5 5	8340 11146 11012	296 404 386	3 5	10334 11522	364 414
975138	3 1145	1905	12998	3.6	468	1956 1957 1958 1959 1960	64 250 524 830 237	12903 12861 13077 13186 13033	3.6 3.6 3.6 3.6	464 460 469 474 466	63 241 502 626 227	11617 11586 11846 11943 11770	435 433 439 442 435	61 212 456 754 230	13164 11550 12462 12581 12819	480 430 464 464 473
975683	3 193	359	11441	3.8	433	1953 1954 1955 1956 1957 1958 1959 1960	1 20 37 67 87 119 24	12720 12063 11281 10719 10975 11617 12262 12004	3.4 3.8 3.9 3.6 3.8 3.8 3.8	453 457 439 412 415 440 462 448	1 20 35 66 78 118 24	10620 12485 12415 11528 11377 11610 12116	382 471 474 434 428 441 452 450	2 18 34 55 74 106 24	12306 12024 12183 11349 11997 12435 12625	435 445 457 427 454 465 479
975892	2 2	2	9910	3.5	347	1957 1959	1	6830 12990	3.6	245 448	1	8090 12930	279 469	1	ช121 11456	299 407
975893	3 183	324	11540	3.8	433	1955 1956 1957 1958 1959 1960	17 37 62 84 98	11821 11157 11227 12103 12004 10306	3.8 3.7 3.8 3.0 3.7	447 421 421 454 450 384	17 37 61 80 98 25	11625 11249 11770 12129 12147 11129		17 35 51 74 89 26	11919 12093 11798 12270 12591 12504	
970709) 1	2	14950	3.7	545	1958 1959	1	13270 16630	3.7	490 599	1	13490 12780	505 494	1	15402 13865	579 520
976710) 1	2	16465	3.4	548	1958 1960	1	17630 15340		593 502	i 1	15140 13120	525 463	1	14519	517
97711(3449	6479	11124	3.9	429	1954 1955 1956 1957 1958 1959	206 606 735 1129 1495 1801 507	11331 10842 10854 10966 11323 11588	3.9 3.9	433 422 421 424 438 446 442	197 590 714 1116 1342 1795 487	12136 11874 11630 11735 11653 11641 11749	458 454 445 445 449 449	175 524 680 865 1243 1645	11677 11846 11795 11524 11911 12152 12409	437 445 451 441 459 468 480
978756	311	505	10734	3.8	402	1953 1954 1955 1956	8 10 23 45	9913 11012 10689 11099	3.7 3.8 3.9 3.8	372 416 417 419	8 10 23 45	11475 11345 11383 11501	421 428 430 433	10 15 42	11459 11657 12294	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

8Y YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECURDS NO.		TEST PCT.	FAT LB-	FRESH YEAR	RECURUS NO.		TEST PCF.	FAT LB.	305-DAY RECORDS NO.			YEARLY HERECORDS		FAT
						1957 1958 1959 1960	HOUS 125 135 135 28	10272 11068	3.8 3.8 3.7 3.6	387 417 428 414	122 122 133 27	11392 11710 11596 11246	428 445 434 419	103 109 122 28	11606 11851 12179 12372	435 450 456 401
y78/5	l 8	18	10522	3.8	401	1955 1956 1957 1958 1959	3 4 4 5 4	11540 12218 10750 9857 9283	3.9 4.0 3.8 3.9 3.5	454 486 420 396 329	3 4 4 3 4	12143 12718 8343 11690 11283	443 498 326 467 422	3 4 2 2 2 3	13058 11865 11298 14268 10885	513 454 430 571 401
980008	3 4	5	8648	3.4	289	1957 1958 1959 1960	1 1 1 2	7590 10930 11510 7890	3.4 3.6 3.5 3.2	256 393 400 252	1 1 1 2	9510 13950 14050 8825	350 516 506 342	1 1 2	14072 14312 10345	530 528 410
980384	5 78	276	10940	3.8	411	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 25 48 52 44 23 19 15 14 6	15680 11395 11616 11352 11283 11986 11898 11696 11913 11171 10337 9900	4.1 3.8 3.8 3.8 3.8 3.8 3.7 3.8 3.6 3.7 3.6 3.7 3.2	648 428 435 434 453 444 438 451 423 592 313	13 34 39 41 26 22 18 15 15	11774 11771 11611 10977 11095 12198 11632 12306 12247 12330 12580	439 441 429 409 413 455 434 450 454 457 488	14 27 23 18 14 13 6	10644 11333 11991 12289 12291 12368 12619 12132	410 424 445 467 467 470 450
981308	3 13	14	9648	3.6	350	1958 1959 1960	. 12 . 12	9270 9483 11210	3.0 3.0 3.0	332 344 404	1 12 1	10460 11913 11220	376 442 418	12 1	11708 12208	435 460
98143:	3 I	4	14358	3.7	534	1955 1956 1957 1958	1 1 1 1	12830 14410 15210 14980	3.5 4.0 3.5	459 499 604 512	1 1 1	9200 11020 10450 10190	343 420 386 363	1 1	10311 11783 11707	377 435 446
982050) [3	12423	5.7	458	1955 1957 1959	1 1 1	11410 13830 12030	3.7 3.7 3.6	424 511 439	1 1 1	8000 9870 7330	380 391 280	1 1	7161 10311	347 393
982292	2 3	4	10978	3.7	410	1958 1959 1960	1 2 1	11880 10175 11130	3.8 5.7 3.7	457 375 414	1 2 1	11220 10575 7960	419 391 361	1	120 7 7 10867	447 402
983739	3	В	14591	5.7	544	1955 1956 1957 1958 1959	1 1 1 3 2	13510 16240 13840 14637 15160	3.5 3.4 3.4 3.7 3.1	4/1 546 408 540 553	1 1 1 3 2	11430 13360 12950 11710 12535	419 474 462 436 466	1 1 3 2	13058 14246 13305 12993	458 508 485 468
98471	7 3	4	10715	3.6	384	1959 1960	3 1	10660 12860	3.7	391 442	3 1	10123 9770	3 7 5 358	1	10867	402
984199	32	41	11470	3.7	418	1957 1958 1959 1960	1 10 24 6	6540 11343 11469 11775	3.0 3.7 3.8 5.3	233 422 429 389	1 10 24 5	7060 12357 11775 11742	258 447 439 426	5 23 4	11105 12017 12750	404 451 467
98480	1 1	3	13397	3.8	500	1952 1953 1954	1 1 1	16520 14000 9670	3.0 3.7 4.1	588 518 395	1 1 1	14260 11130 12480	489 376 447	1	11129	366
984803	3 5	5	12718	3.5	455	1954 1957 1958 1959	1 1 1 2	14630 13800 5390 14885	3.3	504 487 188 547	1 1 1 2	11500 7200 12140 14920	410 266 463 537	2	11963	447
985727	2 45	118	11239	3.7	410	1950 1751 1952 1953 1954 1956 1957 1958 1959 1960	3 16 21 22 17 14 9 6 4 3	9987 11874 10652 11105 12376 11704 12068 11462 11433 7317 12230	3.7 3.6 3.0 3.6 3.8 5.7 3.5 3.9	356 429 382 401 442 436 438 394 447 280 511	1 7 13 21 10 15 9 0 3 3	14540 10689 10885 10252 11315 11647 11376 11118 10260 11167 11710	504 378 390 385 417 428 420 415 395 429 446	10 18 12 8 6 3 3	10121 10746 10956 12137 11596 12844 11841 10780	331 404 419 452 476 497 453 415
98050	2 6	13	10552	3.6	384	1952 1953 1954 1955 1956	1 6 3 1 2	14600 11150 11257 13480 10090	3.5 4.2	52 1 406 394 562 357	1 6 3 1 2	10720 9513 11377 12550 10655	375 359 425 466 388	2 2	11347 10110 13799	430 336 545
96899	3 2	2	14535	3.6	522	1959	2	14535	3.6	522	2	13370	477	2	13489	503
98993	9 6	7	11587	4.3	499	1958 1959 1960	1 4 2	11000 11138 12410	4.3	465 480 548	4 2	11490 13200	44 <i>f</i> 549	4 2	12135 14121	
99036	1 1	2	10405	3.3	344	1959	2	10405	3.3	544	1	11670	457			
49285	5 576	577c	12031	3.7	439	1957 1958 1959	184 288	11343 12116 12329	3.7	421 445 449	27 161 286	11773 11620 12035		22 170 266	11631 12344 12393	

TABLE 15.--- OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPLO BY BRELD, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

									, , , , , , ,		· RESILEMING	T L AIN				
SIRE NO.	UAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	305-DAY (RECURUS NO.			YEARLY H RECORDS NO.	MILK	
						1960	HOLS 76	TEIN 11499	3.7	420	71	11712	434	76	12607	463
993764	4 6	10	11629	3.6	414	1957 1958 1959 1960	1 3 2 2	10260 11622 14095 11010	3.6 3.6 3.4 3.8	368 418 471 411	1 4 2 2	11550 11988 12585 12995	400 439 450 521	1 3 2 2	11848 12074 12617 13609	476 444 454 534
995619	3	9	11801	3.4	397	1954 1955 1956 1957 1958 1959	 	15480 6910 13020 12240 12160 9920 10430	3.3 2.9 3.6 3.7 3.3 3.2 3.3	508 198 470 452 405 316 347	1 1 1 3 1	10070 11490 9580 12130 10713 12000 12620	341 361 359 455 400 443 482	1 1 1 3 1	9494 9974 9941 11630 11227 12753 12949	317 336 338 419 412 469 492
997478	3 671	1156	10887	3.7	396	1955 1956 1957 1958 1959 1960	14 95 222 342 381 102	11559 10910 10994 10915 11354 11552	3.7 3.6 3.0 3.6 3.7 3.6	430 394 398 398 413 417	14 95 220 319 380 100	13071 11892 11756 11829 11946 11530	482 443 438 439 442 426	11 93 186 287 357	13011 12390 11406 12074 12387 12544	477 455 426 451 458 466
99748	1 151	239	11347	3.7	420	1953 1954 1955 1956 1957 1958 1959	1 6 14 24 37 57 77 23	13350 10987 13046 11083 11705 10963 11602 12563	3.4 3.7 3.6 3.7 3.6 3.7 3.7	458 398 498 406 418 405 428 460	1 6 14 23 37 54 76 23	12470 10888 12182 11706 11284 11567 11746 11478	431 392 459 431 424 436 438 427	4 12 19 29 49 72 23	10143 11857 11541 11338 11927 12386 11928	360 439 431 427 446 463 445
997172	2 9	23	10749	3.5	37в	1953 1954 1955 1956 1957 1958 1959	2 4 5 3 3 3 3	10245 11323 10700 11427 11753 11413 10533	3.7 3.5 3.5 3.6 3.5 3.5 3.5	382 394 375 408 409 400 368	1 4 2 3 3 3	10340 12198 12255 11700 11943 12957 10587	379 447 434 421 426 479 402	1 4 2 3 3 3	10279 12290 10723 11391 10991 13087 11373	368 455 393 423 408 474 431
998191		1	5850	3.9	228	1953	ì	5850	3.9	228	1	7300	278			
999678	3	3	11880	4.0	476	1959 1960	1 2	13910 10865	4.0 4.0	557 436	1 2	11980 11830	476 461	1 2	13832 12715	544 481
999938	3 4	10	11852	3.7	439	1952 1953 1954 1955 1957 1959	1 2 2 3 1 1	12360 9015 13245 11040 13150 15160	3.5 3.6 3.5 3.5 4.3	428 323 442 383 471 645	1 2 2 3 1	13050 10300 11145 10250 12510 11580	453 385 429 404 475 448	1 3 1	12437 10130 12089	433 393 460
1000390	35	43	12351	3.8	462	1958 1959 1960	30 7	15453 11885 12441	3.8 3.8 3.7	585 450 450	30 7	12005 11835 10263	459 438 385	4 28 7	11404 12717 12337	443 470 463
1000392	2 27	55	11647	3.6	417	1954 1955 1956 1957 1958 1959	11 17 6 7 7 6	12307 11067 13053 12290 11344 11725 12320	3.6 3.7 3.7 3.7 3.6 3.8	437 405 477 450 417 428 462	11 17 5 7 7 6	11916 11556 12100 11884 12000 11345 11590	433 434 454 452 459 424 406	10 16 6 4 7 5	12061 11449 12052 10729 12530 13318 12775	442 427 454 420 475 498 477
1001512	2 66	107	10439	3.9	403	1957 1958 1959 1960	16 40 42 9	9236 10340 11035 11344	3.9 3.8 3.9 4.0	359 393 432 451	16 36 42 9	11216 11849 12636 12753	424 442 478 477	13 32 41 9	11268 12078 12716 13366	427 458 481 510
1001768	3	14	10172	3.9	402	1959 1960	2	9545 11205	3.9	377 456	2 2	13145 13290	499 529	2 2	13233 13723	
1002177	7 437	835	11779	4.0	471	1951 1952 1953 1954 1955 1956 1957 1958 1959	15 28 44 62 103 120 139 155 181	11609 11428 11251 11209 11242 11219 11678 12640 12925 12362	3.9 4.1 4.0 4.1 4.1 4.0 4.0 4.0	455 462 451 450 455 454 464 506 513	9 19 42 60 101 117 137 147 180 36	11860 12554 11549 11464 12178 11704 12006 11940 12127 12047	449 471 435 425 451 440 450 456	8 56 93 110 126 137 167 37	10749 11452 11558 12168 11692 12243 12694 12969	399 423 426 463 444 462 480 492
1003598	3 91	156	11330	3.7	439	1953 1954 1955 1956 1957 1958 1959	1 7 12 11 20 35 55	11450 11480 12130 12081 11527 11679 12514	3.7 3.7 3.6 3.6 3.7 3.7	427 415 449 430 422 430 465	1 12 11 20 33 55	9830 12744 11847 12071 11628 11977 11683	393 467 443 442 438 447 445	6 8 7 16 30 52	11781 11145 12009 11158 11959 12468	431 411 478 413 451 466

TABLE 15.--DAUGHTER-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPED BY BRELD, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

384

DAUGHTER AVERAGE BY SIRE

						.,	200112 111		, 510			LAN				
SIRE NU.	DAUGHTERS NO.	RECORUS NO.		TLST PCT.	FAI L8.	FRESH YEAR	RECUROS NO.	L8.	TEST PCI.	FAT L8.	305-DAY (RÉCORDS NO.			YLARLY HI KLCOROS NO.		
						1960	H0L5	11609	3.6	429	15	11587	431	lo	12747	474
1003835	1	1	170+0	3.9	672	1959	1	17090	3.9	072	1	14770	581	1	13908	552
1004144	2	4	10009	3.3	323	1958 1959 1960	2 1 1	8795 11820 11280	3.4 3.3 3.2	292 392 364	2 1 1	10360 9810 9330	391 370 337	1 1 1	11587 12034 12775	431 452 456
1004232	2 19	26	10102	3.7	377	1957 1958 1959 1960	3 6 5 12	6323 11202 10966 10343	3.6 3.7 3.7 3.8	225 419 408 390	3 6 5 12	10380 10458 10434 10720	362 383 371 394	2 4 5 12	5913 10655 12092 11960	223 397 439 443
1004259	1	1	13940	5.6	503	1959	1	13940	3.6	503	1	13600	530	1	14192	529
1005575	5	4	13693	4.0	544	1958 1959	2	14580 13030	3.9 3.9	570 508	2 2	9145 11770	390 451	2 2	9538 11047	403 433
1006317	' 15	41	10415	3.8	398	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5 8 9 5 6 4 2 2 1	10447 10399 10554 9240 11595 12215 10500 12036 8680 10000	3.6 4.0 3.6 3.7 3.7 3.3 4.2 3.6	373 408 378 329 426 423 347 487 315 383	6 8 5 6 4 2 2 1	11037 11198 10726 10630 11443 11140 12635 9140 10620	408 415 403 400 429 421 487 350 405	3 6 4 2 2 1	10341 10929 11282 11271 12399 12099 10061	398 405 422 424 528 443 305
1006864	7	9	11989	3.8	446	1955 1956 1959	4 2 3	10788 11885 13653	3.9 3.6 3.6	413 427 498	4 2 3	9840 8310 12977	371 334 480	4 2 2	9502 9450 14214	365 379 533
1006866) 1	1	15520	3.1	572	1959	1	15520	5.1	572	1	12760	461	1	11456	407
1007020) 1	2	10175	3.6	364	1953	2	10175	3.6	304	2	10400	377			
1007029	1	1	9560	3.3	311	1959	1	9560	3.3	311	1	13220	473	1	13353	513
1007194	18	23	11875	3.8	444	1958 1959 1960	9 13 1	12802 11652 13220	3.8 3.8 3.4	480 435 445	9 13 1	12276 11418 11500	462 425 348	9 10 1	13219 12934 12546	488 480 438
1007680	276	358	11750	3.7	439	1956 1957 1958 1959 1960	3/ 106 166 46	10313 10881 11923 12033 11849	3.9 3.7 3.6 3.7 3.7	403 404 451 449 445	3 35 88 165 37	12583 12379 13107 12192 12153	462 453 484 448 451	3 33 09 143 43	12204 11489 13516 13040 13815	479 427 499 482 515
1008622	<u> </u>	9	12948	5.8	489	1957 1958 1959 1960	1 3 5 2	9050 15240 12373 9895	3.8 3.7 3.8	327 582 451 385	1 5 5 2	8950 12233 10860 10365	318 450 399 403	1 3 2	12437 12288 10704	470 453 401
1008924	256	483	10831	3.7	405	1954 1955 1956 1957 1958 1959	66 88 107 97 91 2d	11267 10738 10599 11021 11007 11416 11130	4.0 3.7 3.7 3.7 3.7 3.7 5.7	443 401 397 406 407 424 410	64 85 105 86 89 27	12213 11725 11070 10971 11576 11508 11303	462 438 413 409 423 427 418	3 54 83 80 86 84 27	10595 11298 11447 10854 11401 12210 11922	425 430 430 415 454 454
1009371	50	72	13506	3.9	522	1954 1955 1956 1957 1958 1959 1960	1 4 1 8 20 32 6	17090 14593 11760 12796 11912 13923 11608	3.4 3.9 4.0 3.8 4.0 3.9 3.8	579 567 464 488 476 542 444	3 1 8 18 32	15833 14310 12715 11611 12579 12050	592 538 480 449 488 477	1 1 8 15 32 6	17069 16230 15772 13132 12753 12861 13631	686 607 574 505 489 502 533
1009372	2 47	65	14271	3.9	557	1956 1957 1958 1959 1960	2 3 12 37 11	12355 8743 14094 14897 12985	4.1		3	12490 12640 12248 13045 11613	495	2 3 11 3 <i>t</i> 11	13582 9349 13233 13466 13811	366 510 517
1009405	1	1	12430	3.5	440	1959	1	12430	3.5	440	1	10530	371			
1010660) 1	1	15070	3.8	569	1959	1	15070	3.8	569	1	13060	488	1	13353	513
1012574	155	∠82	11935	3.7	433	1952 1953 1954 1955 1956 1957 1958 1959	3 5 24 30 23 39 58 86 14	11499 11822	4.0 3.8 3.8 3.6 3.7	425 459 441 428	3 4 24 30 23 39 52 86 14	11216		22 25 19 32 49 84 14	11074 11089 12341 11034 11416 12055 12746	415 428 444 423 43d 454 457
101259:	3 14	19	11281	3.6	410	1958 1959 1960	5 13 1	10604 11522 9480	3.7 3.6 3.0	388 419 340	5 12 1	11028 11328 12150	409 434 480	5 12 1	11543 11894 11391	457 454 453
1013036	5 6	7	12132	3.8	455	1958 1959		11770 12280			2 5	10055 11918	409 447	2 5	12230 13025	444 495

TABLE 15.--OAOGHTER-AVENAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREEDING BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	OAUGHTER	AVERAGE	84 21	RE		к	LLORD AV	RAGE 8	Y 51R	ЕБУ	FRESHENING	YEAK				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.	MILK L8.		FAI L8.	SOS-BAY RECORDS			YEARLY HE RECORDS NO.	EKU AVE MILK LB.	FAT
							HOLS	félN								
1013415		5	10050	3.8	383	1958 1959	1 4	12350 9913	3.7 3.8	454 379	1 4	11000 11388	599 410	14	11835	439
1013716		1	13050	3.3	429	1959	1	13050	3.3	429	1	13010	475			
1013760) 4	10	12843	3.7	464	1956 1958 1959 1960	1 4 4 1	11400 13373 12525 12190	3.5 3.6 3.7 3.7	403 483 455 447	1 4 4	10290 12220 11743 11960	371 446 438 510	1 3 4 1	12437 12808 13042 12568	439 465 480 467
1014490	79	167	11572	3.6	414	1952 1953 1954 1955 1956 1957 1958 1959	1 17 25 27 15 14 28 29	12590 11519 10596 12137 11795 12801 13109 12146 10618	3.2 3.7 3.6 3.6 3.5 3.6 3.6 3.6	406 417 376 435 417 469 466 432 377	1 17 25 26 15 14 26 28 10	11400 10698 11180 12619 11065 12774 12047 11745 11102	407 415 412 466 431 481 449 448 428	4 21 25 13 13 22 25	11126 11137 11476 11881 12528 12555 12588 11793	437 410 426 452 478 474 478 451
1014608	162	182	12095	3.7	450	1958 1959 1960	8 136 38	10145 12031 12548	3.8 3.7 3.7	381 447 470	7 136 37	10993 12259 12829	403 453 478	7 123 37	11328 12859 13459	435 475 499
1015248	3 /93	1277	11717	3.7	436	1954 1955 1956 1957 1958 1959	32 70 61 155 319 514 126	12085 11580 11548 11388 11862 11776 11947	3.7 3.8 3.7 3.7 3.7 3.7	444 433 425 418 441 440 436	32 69 60 154 296 506 119	11508 11468 11214 11002 11359 112477 11225	425 434 420 411 429 426 427	28 62 60 121 282 463 122	11345 11217 12054 11441 11563 11970 12101	418 423 451 432 436 453 461
1015251	1 1	2	9765	3.5	344	1955 1956	1	8740 10790	3.5 3.5	308 379	1	9970 9480	374 362	1	7586 9581	276 365
1015792	2 244	473	12124	3.8	464	1955 1956 1957 1958 1959 1960	34 71 92 109 135 32	11655 11985 11753 11954 12471 12272	3.9 3.9 3.9 3.8 3.8 3.7	449 469 456 458 475 451	33 70 91 99 135 31	11312 12165 11691 11968 12097 11526	415 444 436 441 443 423	27 69 88 90 130 32	12192 12845 12302 12622 12635 12767	443 492 460 469 473 474
1015936	167	328	12229	3.7	452	1955 1956 1957 1958 1959 1960	11 58 65 72 95 27	12104 12128 12545 12840 12544 12363	3.8 3.7 3.7 3.1 3.1 3.1	461 448 466 473 461 453	11 57 64 70 95 27	12388 11694 11444 11925 12178 12218	452 439 428 444 450 454	10 52 53 60 89 25	12200 12647 11331 12109 12766 12917	447 475 429 454 473 481
1016212	2 1	3	12613	3.6	459	1957 1958 1959	1	11290 13150 13400	3.6 3.6	414 476 488	1 1 1	9980 12150 11400	356 440 406	1 1 1	10050 9657 12066	362 350 447
1016852	2 492	979	10688	3.6	388	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 20 60 131 197 216 125 79 69 63 13	13480 10724 11192 10769 11176 11206 10923 10174 11282 10388 12653	3.6 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	482 398 409 391 404 407 395 365 413 379 445	8 38 126 191 206 121 76 66 63	9730 11195 10911 11635 11754 11487 11269 11965 11666 12165	385 425 406 433 437 429 422 446 434 459	30 167 169 107 57 59 60 18	10816 11264 11499 11729 11203 12042 12090 12534	405 421 42d 439 415 448 450 473
1016853	3 435	661	10600	3.7	390	1951 1952 1953 1954 1955 1956 1957 1958 1959	11 28 76 110 84 56 77 105 97	11314 10930 10815 10580 10691 10819 10804 10617 11258 11059		396 399 388 389 396 403 405 395 416 405		13118 11816 11123 11125 11255 10633 10956 11227 11628 10691		21 90 75 44 57 96 91	11355 10908 10849 11351 11017 11280 12082 12104	417 404 402 424 415 478 454 455
1016950) 848	1440	11529	3.8	438	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	25 36 31 27 39 49 185 370 520 158	12607 12347 11868 12051 12035 11272 10922 11527 11959 11920	3.6 3.7 3.6 3.7 3.6 3.7 3.8 3.8 3.8	456 451 441 437 449 420 417 442 455	16 22 28 27 34 47 183 332 517	12694 11903 11739 11499 11803 11807 11365 11256 11438 11167	468 441 442 425 442 447 444 438 443	8 26 36 46 129 304 4/1	11095 11009 11835 11900 11340 11820 11941	414 403 440 448 433 458 461
1017139) 18	∠5	1064/	3.8	40∠	1954 1955 1956 1957 1958 1959	1 8 1 3 4	9450 11616 11193 13716 8723 10995	3.6 3.9 3.8 3.9 3.7 3.7	335 448 414 538 327 415	1 8 8 1 2 4	10220 12214 12251 14000 9420 12663	373 460 457 508 391 470	1 7 7 1 1	9091 10833 13376 14323 7358 12952	3/1 409 497 529 353 485

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING GROANIZATIONS--GROUPED BY BREED.

8Y YEAR OF FRESHEMING--RECORDS FROM THIS STATE ONLY

8Y YEAR	OF FRESH	ENINGRECOROS	FROM	THIS	STATE	ONLY					
OAUGHTER	AVERAGE 8	BY SIRE		۶	RECURO	AVERAGE	8 Y	SIRE	8Y	FRESHENING	YEAR

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	SOS-DAY RECORDS			YEARLY H. RECOROS NO.		
							HOLS:	TEIN								
101779	7 1	1	11430	3.4	393	1959	1	11430	3.4	393	1	9440	341	1	11827	422
102027	7 12	22	11354	3.9	436	1957 1958 1959 1960	10 8 2	8965 11527 12449 13070	4.0 3.9 3.8 3.9	352 442 471 504	2 7 8 2	11650 10364 11445 11760	428 414 439 466	2 7 8 2	11680 11263 12012 11968	433 445 457 480
102047	3 449	779	11981	3.8	457	1956 1957 1958 1959 1960	27 119 195 325 113	11133 11548 11792 12079 12208	3.9 3.6 3.9 3.8 3.6	430 443 455 462 463	27 118 186 323 113	11891 11841 11998 12131 12086	441 442 449 450 450	27 114 162 310 111	12225 12160 12569 12793 12960	465 457 469 477 485
102157	1 4	4	11330	3.8	430	1959 1960	3 1	11583 10570	3.8 3.7	442 393	3	10987	417	1	10269	380
1022593	3 2	3	9500	4.0	383	1955 1958 1959	1 1	11740 10110 4410	4.3 3.9 3.2	499 392 141	1 1 1	13360 10550 9940	467 390 365	1	11772 11837	444 436
102260	1 2	3	13880	3.6	492	1959 1960	2	14155 12510	3.6 3.7	500 458	2 1	12970 12850	477 466	1	12241 12971	463 486
102300	+ 1	2	10525	3.9	407	1958 1959	1	9390 11660	4 • 1 3 • 7	383 430	1	8690 10280	371 416	1	10508	422
102303	9 1	2	10900	3.6	393	1959	2	10900	3.6	393	1	12050	470			
102396	7 ° 864	1873	11104	. 3.8	414	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 42 171 291 358 368 190 162 138 109 43	10650 10950 11362 11238 11279 11491 11002 11245 11897 11570 11053	4.1 3.6 3.7 3.7 3.7 3.8 3.8 3.7 3.7	435 414 419 416 419 432 412 423 442 430 408	125 276 349 361	11427 11319 11091 11267 11335 10909 11209 11547 10993 11252	426 421 409 417 422 407 416 430 417	79 312 328 165 128 110 105 43	11242 10951 11142 11415 11184 11811 12016 12065	414 407 415 430 426 441 455
102445	3 15	23	12352	3.7	456	1957 1958 1959 1960	1 7 13 2	12620 13581 11807 13300	4.0 3.6 3.7 3.7	509 494 437 491	1 7 13 2	10340 10481 11777 11935	396 391 447 430	4 9 2	12431 12652 14770	465 467 546
102485	2 1	2	10190	3.6	364	1955 1956	1	9760 10620	3.5 3.6	341 386	1	10300 9890	430 396	1	9777 10606	360 404
102485	6 1	1	15500	3.6	559	1959	1	15500	3.6	559	1	14610	551			
102520	5 1	4	11483	3.6	403	1952 1953 1954 1955	1 1 1	11060 12790 14340 7740	3.6 3.8 3.1 3.7	396 488 444 284	1 1 1	13190 10900 11270 12700	434 398 419 488	1	11532 11434	
102536	1 1	1	8800	4.1	363	1958	1	8800	4.1	363						
102590	2 1	1	15390	3.4	521	1959	1	15390	3.4	521	1	14630	557			
102611	5 2	2	11865	3.8	440	1958	2	11865	3.8	440	2	10555	389	2	12252	450
102693	8 210	410	11326	3.8	426	1952 1953 1954 1955 1956 1957 1958 1959		11896 11331 11367 11974 11504 11385 11331 12401 9360	3.7 3.8 3.8	441 419 423 452 446 426 430 468 344	13 35 54 55 38 44 54 77 22	11893 11389 11389 12353 11665 11673 11691 12087 10632	450		10677 11216 11992 12060 11428 12358 12581 12366	
102812	3 25	32	12457	3.8	470	1954 1958 1959 1960		12960 12479 12497 8050	3.7	582 470 468 322	8 22 1	11999 11865 108,10	444 439 418	6 21 1	12243 12539 10900	452 463 426
103032	3 1	1	13000	3.6	471	1959	I	13000	3.6	471	1	13120	490	1	13353	513
103040	4 34	41	12641	3.6	452	1958 1959 1960	9 27 5	11547 12801 12068		412 460 423	9 27 4	11973 11987 13000		8 26 5	12464 12071 130 00	467 448 481
103063	5 20	45	10963	3.7	398	1952 1953 1954 1955 1956 1957 1958 1959	4 8 14 10 5 2	10958 12418 10447 10939 11284 10110 13670 13170	3.6 3.5 3.5 3.4	403 458 395 395 395 349 469 428	3 8 13 10 5 2 1	11733 11104 10848 11848 10844 11720 12250 12100	429 444 460	12 8 4 1 1	10528 10851 12154 10497 13145 12786	495

TABLE 15.--DAUGHTER-AVERAGE DE SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER		BY SI				ECORD AVI		Y SIR	E BY	FRESHENING	YEAR				
SIRE	OAUGHTERS	RECOROS	MILK	LEST	FAT	FRESH	RECORDS	MILK	TEST	FAT	305-DAY (YEARLY HI	ERD AVE	RAGE
NO.	NO.	NO.		PCT.		YEAR	NO.	LB.	PCT.		NO.	LB.		NO.	LB.	
1031803	125	235	10372	3.7	379	1954	HOLS	10987	3.7	407	15	11783	441	11	11102	415
						1955 1956	5 I 4 B	10897 10428	3.7	398 381	50 47	11892 11132	445 418	46 48	11636 11506	459 431
						1957 1958 1959	36 35 37	10344 10209 11038	3.7 3.7 3.7	387 375 401	36 31 37	11029 11279 11777	407 423 436	28 31 37	10713 11668 11972	396 440 447
1033024	6	٥	11805	3.7	440	1960	13	9934	3.6	357 509	12	1084B 13205	410	13	12474	471
1033024	· ·	Í	11003	3*1	440	1959 1960	5 2	11738 12720	3.7	437 478	5 2	12004	438	4 2	13511	494
1033032	7	8	12192	3.7	452	1959 1 960	6 2	11942 11925	3.7 3.8	438 451	6 2	11225 9725	399 361	5 2	12075 12650	442 476
1033033	15	5.3	11988	3.8	457	1951 1952	l 5	11870 9654	4.0	471 363	I 3	15090 13173	564 494			
			•			1953 1954	11 10	12372 12515	3.8 3.8	472 473	10 10	11759 11520	426 428	4 9	12598 11064	457 406
						1955 1956 1957	8 5 6	13806 14058 11340	3.8 3.7 3.6	523 524 409	8 5 6	13074 12528 12168	453	7 4 6	12373 12080 11832	460 435 434
						1958 1959	4	11793	3.7	409 442 400	3 2	12103	441 465 443	3 2	11979	457 466
103390B	27	7.7	11670	3.7	1.21	1960	1	13720	4.4	608	1	11810	475	1	13004	519
1033408	27	33	11472	2 • 1	421	1958 1959 1960	7 - 14 12	10436 11480 11659	3.8 3.7 3.7	391 428 425	7 14 12	10260 11349 12458	383 428 456	4 13 11	11571 11203 12986	
1033985	259	477	10647	3.6	377	1950 1951	1 14	8510 11565	3.7 3.5	319 407	1 5	7240 11780	369 447			
						1952 1953	28 46	10226 10375	3.5	366	13 39	9972 10662	380 398	10	11453	
						1954 1955 1956	82 84 52	10084 10733 10623	3.6	360 383 374	81 81 48	10605 11360 10757	429	66 73 48	10196 11112 11336	384 416 425
						1957 1958	61 53	10797	3.5 3.5 3.5	382	56 49	10753	406	47 45	10841	402
						1959 1960	47 9	12434 11090	3.5 3.5	440 370	46 9	11312 11270		44 9	11783 11332	445 432
1034452	1	1	8190	3.6	296	1959	1	8190	3.6	296	1	9220	365	1	9919	377
1034466	32	52	10425	3.7	388	1953 1954 1955	1 11 15	11340 10383 11016	4.5 3.8 3.8	511 369 419	1 11 15	13400 10555 11243		11	10418 10417	392 387
						1956 1957	5	9774 12644	3.8	317 464	i4 9	11443		3	13055	485 467
						1958 1959	8 5	11539 8664	3.0	417 322	8	11945 12228	447	6	12212 13699	450 508
1034467	4	6	11454	3.7	422	1960 1958	2	9705 11400	3.9	371 438	1	12580	479	2 I	12410	468 455
1034471	1	1	15440	3.8	5B8	1959 1958	5	11502 15440	3.7	430 588	5	11400	420 523	5 I	12184	455 468
1035454	1	1	12730	3.6	458	1959	1	12730	3.6	458	1	9470	360	· .	11053	425
1035850	17	30	10797	3.9	424	1954 1955	3	13730 11130	3.9	527 430	3 4	12400 11008	477 443	3	11794	432
						1956 1957	3 5	12543		470 349	3	11077	462	3 2	12085 11642	449
						1958 1959	8	11084 11951	3.9 3.9	431 466	4 8	11015 11586	406 427	4 8	11723	417
1035889	2	3	12610	5.4	428	1960	2	10105	3.7	472	2	10110	426 37+		12775	403
						1959 1960	1	11790 12900	3.6 3.1	430 404	1	10920 11670	379 404	1	10649	388
1037451	1	3	11687	3.6	422	1955 1957	1	10770	3.6	393 417	1	12510 14080	500 513	1	13799	
1038489	1170	1908	12289	3.8	467	1958 1956	40	12620	3.6 3.8	457	1 4 U	12800	488	1 36	12535	482
						1957 1958	248 98 د	11824 12244	3.8 3.0	447 466	242 568	11757 12123	443 450	222 523	1177B 12383	467
						1959 1960	841 181	12609 11732	3.8 3.8	460 446	837 173	12113	456 444	778 174	12714 12706	
1038494			12540		375	1957	1	12540	3.0	375	1	9040	330		16.24.0	61.2
1038627	5	6	12373	3.6	451	1958 1959 1960	2 3 1	13325 10100 14410	3.8 3.5 3.5	501 358 501	2 3 1	12280 10623 12110	450 413 478	1 3 1	15140 11605 13865	445
1039074	364	727	11236	7 ، ک	419	1951 1952	2 կկ	12645 11766	3.7	46d 43B	1 33	9510 11558	339 455			
						1953 1954	80 81	11274 11547	3.7 3.7	418 429	74 79	11498 11503	429 432	14 71	11256 11745	439
						1955 1956	82 66 81	11708 11237 11354	3.7 3.7 3.7	433 419 425	79 66 80	11719 11630 11439	441	70 60 70	11666 12092 10967	453
						1957 1958 1959	102 142	10626 11506	3.8		100 140	11439	423	91 135	11862	442

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

DAUGHTER AVERAGE BY SIRE

STRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS ND.	MILK LB.	TEST PCT.	FAT LB.	305-DAY (RECDRDS NO.	CONTEMP MILK LB.	. AV. FAT LB.	YEARLY H RECORDS ND.	ERD AVE MILK LB.	
						1960	HDLS	TE1N 11601	3.7	430	ել ել	11813	439	47	12623	469
1039565	5 22	43	10987	3.9	42 2	1953 1954 1955 1956 1957 1958 1959	2 4 13 4 3 8	12210 10468 11457 12178 11797 11238 10808	3.8 3.6 3.8 3.9 3.8 4.0 3.9	465 400 434 467 449 441	2 4 13 4 3 8 9	12210 11283 11129 11558 10533 11966 11597	463 439 421 424 422 459 438	2 4 12 3 3 6	11227 11137 11489 10689 10802 11865 11607	447 432 424 397 413 455
1041009	9 1	1	10400	3.6	379	195B	1	10400	3.6	379	1	12770	4 B2			
1041165	5 25	58	10788	3.6	389	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 9 19 13 7 1 1 2 4	10920 10551 11003 11602 12187 14580 7500 6795 8765	4.0 3.6 3.5 3.7 3.6 3.3 3.3	436 378 393 410 443 528 246 226 329	2 7 17 13 7 1 1 2	10205 10014 10286 10913 11349 10370 6800 7310 8255	410 377 380 410 428 409 243 279 342	4 13 7 1 1 2 3	11649 10518 10436 12143 8175 6573 9832	439 395 401 456 26B 239 385
1041665	5 38	113	11326	3.8	43 4	1951 1952 1953 1954 1955 1956 1957 1958 1959	5 12 23 17 19 8 13 8 /	1295B 12002 12261 11943 12058 107B1 10702 12393 11414 11240	3.8 3.8 3.9 3.9 3.9 3.8 3.8 3.7 3.6	475 457 462 462 471 414 404 470 427 408	4 11 22 16 18 8 13 8 7	12075 11541 11635 11571 11522 11126 11258 11493 10706 12160	451 436 422 442 439 426 417 436 404	8 14 16 7 11 8 7	11779 11108 11816 11078 11301 11887 11747 12851	424 423 448 426 424 448 448
1041842	2 658	1119	11433	3.7	423	1955 1956 1957 1958 1959 1960	4 65 191 315 440 104	12123 11208 11140 11745 11712 11590	3.8 3.7 3.7 3.7 3.7	464 411 409 436 435 426	4 63 188 304 436 100	12745 10913 11150 11354 11377 11097	468 408 416 426 426 417	3 60 161 28B 410 102	121B2 12067 11037 11430 11908 11B55	432 450 410 430 446 448
1043768	В 2	2	11320	3.7	421	1959	2	11320	3.7	421	2	10830	432	2	11260	433
1046259	9 646	1234	12059	3.7	443	1952 1953 1954 1955 1956 1957 1958 1959	16 76 112 137 97 146 201 344 105	12618 12078 11877 12284 12085 11699 11881 12647 11957	3.5 3.7 3.7 3.6 3.6 3.7 3.7	447 441 437 455 440 423 436 462 439	13 71 107 135 96 144 195 340	11819 11536 11727 11913 11722 11728 11785 12044 11644	435 431 437 450 439 438 439 446 435	24 103 128 92 129 184 311	11739 11758 11875 12122 11479 12095 12621 12866	449 434 442 454 428 452 468 481
1046466	6 1	1	15210	3.6	543	1959	1	15210	3.6	543	1	13560	512	1	14116	547
104673	6 1	1	14020	4 - 0	561	1959	1	14020	4.0	561	1	11860	450			
104654		2	10920	3.6	394	1958	2	10920	3.6	394	1	8450	315	1	11423	416
1048671		1	12360	3-4	419	1960	1	12360	3.4	419	1	12790	461	1	13189	483 489
104954		13	13535	3.5	475	1958 1959 1960	3 9 1	13585 13441 14640	3.7 3.5 3.5	492 472 507	3 9	13597 12016 15040	511 446 547	3 7 1	13088 12741 17277	472 613
105343	1 1	3	11103	3.4	377	1958 1959	1 2	9790 11760	3.5 3.4	347 392	1 2	10060 11395	406 43B	1 2	112B2 12927	42B 481
105424	6 27	76	11137	4.0	442	1952 1953 1954 1955 1956 1957 1958 1959	4 19 19 12 7 6 4 4	9445 10376 11303 12029 11453 13747 12965 12480 8810	4.0 4.0 3.9 3.9 3.7	376 426 454 482 460 529 498 458 375	4 18 19 12 7 6 4 4	11065 11511 11300 11743 11677 12842 12463 12453 10870		6 16 10 5 4 4 3	10740 11550 11523 11428 12636 13568 12728 11783	430 431 438
105425	1 80	220	11870	3.9	462	1952 1953 1954 1955 1956 1957 1958 1959	9 28 38 36 29 26 25 21	12246 11739 11426 12826 12530 12703 12088 12974 10591	4.0 3.9 3.9 3.B 3.B	455 461 451 503 481 478 471 495	8 27 38 36 29 26 24 21 8	10429 11400 11431 12092 11654 11603 11786 12116 12048	387 426 429 454 445 432 449 453	5 36 31 28 24 23 17 8	11733 11128 11617 12662 11862 11676 12113 12587	442 453
105440	6 228	375	11413	3.8	427	1953 1954 1955 1956	1 7 25 30	11540 11567 10962 11523	3.6 3.8	473 439 414 431	1 7 25 29	14000 11151 12088 11565	499 419 447 437	1 7 19 25	13898 10481 12178 11722	492 381 447 441

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

								ENNOE E			I KESHEMING	LAN				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KLCORUS NO.		TEST PCT.	FAT LE.	305-GAY 6 RECORDS NO.			YEARLY H RECORDS NO.		
						1957 1958 1959 1960	HOLS 50 94 125 43	TL1N 11184 11416 12233 10439	3.6 3.7 3.7 3.7	423 423 457 388	49 87 125 42	12037 11830 11901 11431	448 443 447 427	43 76 112 41	11662 12178 12483 12409	457 454 468 466
105502	1 1	1	14850	3.9	573	1959	1	14850	3.7	573	1	10230	364	1	12143	435
1055398	8 303	583	10962	3.8	416	1953 1954 1955 1956 1957 1958 1959	17 61 74 79 90 112 121 29	11007 10871 12044 11048 10815 11184 11569 11291	3.6 3.8 3.8 3.8 3.8 3.8 3.8	424 413 456 417 413 424 438 430	17 61 71 77 89 104 121 29	12407 11738 12295 11456 11331 11273 11795 11557	450 439 459 432 424 423 423 423	3 55 66 71 35 90 115 29	12807 11828 11855 11850 11491 12018 12168 12617	465 438 444 448 450 450 454
105548.	3 122	232	11327	3.8	428	1954 1955 1956 1957 1958 1959	5 21 22 33 55 75 21	12474 11334 11266 11365 11630 12112 10962	3.6 3.9 3.8 3.8 3.8 3.8	452 435 438 429 447 457 407	5 21 22 33 51 74 20	12610 11796 11741 11861 11955 11864 11570	475 440 445 444 451 447 438	5 19 22 32 48 70	12389 11342 11877 12001 12238 12491 12965	446 417 454 447 400 471 495
105684	l 86	153	11480	3.8	431	1952 1953 1954 1955 1956 1957 1958 1959	1 6 17 20 19 23 26 33 8	12970 10642 12141 11778 11692 11329 11778 11786 10268	3.8 3.8 3.9 3.1 3.7 3.7 3.7	489 401 464 454 436 419 436 437 362	1 17 20 19 23 25 33 5	11400 11430 11663 11780 12895 11573 11478 11453 12338	467 424 441 446 494 429 419 418	2 16 19 16 21 24 31	11800 11641 11806 12581 11800 11589 12196 12636	436 439 445 472 437 431 450 463
1056882	2 730	1246	11911	3.7	441	1953 1954 1955 1956 1957 1958 1959 1960	6 31 77 107 185 302 439 101	12355 11920 11995 11163 11652 12267 12236 12548	3.5 3.7 3.8 3.7 3.7 3.7 3.7 3.6	431 441 453 415 435 455 453 457	6 31 77 102 180 272 434 100	11612 12153 11995 11681 11589 11959 11909 11551	406 454 453 440 431 451 447 432	30 66 100 150 240 406 99	11767 12079 12056 11601 12322 12399 12641	431 448 450 436 462 465 477
1057739	9 1	2	16650	3.6	590	1959 1960	1	17480 15820	3.6 3.5	634 557	1	13840 12190	520 428	1	14235 13832	528 504
106022	3 659	969	11763	3.9	455	1955 1956 1957 1958 1959 1960	10 24 47 253 501 134	11706 11160 12165 13623 12011 11784	3.8 3.8 3.9 3.9 3.9 3.9	438 422 470 447 467 456	9 23 46 229 499 130	11041 11720 11431 11190 11376 11255	443 448 443 436 438 430	5 20 27 203 461 127	11519 12331 11066 11659 11898 11916	453 472 433 453 459 461
106189	4 46	78	11521	3.9	442	1953 1955 1956 1957 1958 1959 1960	2 10 7 13 14 24 8	10130 11906 10866 11088 11731 12192 9793	4.0 3.9 4.2 4.0 3.9 3.7	399 464 452 439 454 457 365	2 10 7 13 13 24 8	12655 12160 11441 11638 11352 11838 10196	472 459 432 443 419 448 368	8 7 11 11 23 8	12464 12784 11468 11608 12222 11994	474 484 443 437 460 444
106191	1 54	81	11619	3.5	404	1955 1956 1957 1958 1959 1960	1 6 d 16 37 13	13020 10878 11418 11136 12031 10859	3.4 3.5 3.5 3.5 3.5	449 360 397 384 421 378	1 6 8 12 37 13	12390 10915 11571 12437 11512 10639	431 408 426 452 427 394	1 6 5 11 32 12	11445 11892 11088 12350 11968 11577	383 427 408 459 444 434
106236	3 1	2	9815	4.2	413	1958 1959	1 1	9450 10180	4.1 4.5	388 438	1	9870 10860	403 462	1	12186	512
106274	7 299	565	10553	3.8	402	1952 1953 1954 1955 1956 1957 1958 1959 1960	12 37 95 125 81 68 65 66	9286 10200 9917 10765 10546 10623 11897 11833 12817	3.9 3.8 3.8 3.8 3.7 3.7 3.7 3.8	360 336 379 412 402 396 446 446 476	9 37 94 120 80 66 57 65	11117 10665 11329 11435 10891 10571 11173 11500 12162	414 406 420 425 405 396 420 426 452	84 105 74 56 54 64	10716 10897 11271 11525 10847 11428 11845 12591	393 400 470 439 408 477 444 475
1063172	2 78	171	10995	3.8	418	1953 1954 1955 1956 1957 1958 1959	5 27 32 19 22 23 32 9	9194 10888 11076 11797 11155 10993 10743 12179	3.5 3.8 3.9 3.8 3.7 3.9 3.9	318 415 432 446 416 421 412 449	4 29 32 17 21 20 32	11350 11418 12208 11760 11748 11364 12002 12868	423 431 458 443 441 416 442 496	1 29 31 16 21 20 28 9	11380 11565 11900 11981 11410 11749 12425 13022	411 435 446 457 431 433 455 476
106471	6 114	286	12308	3.7	461	1953 1954 1955	41 60 47	12559 12141 13182	3.7 3.7 3.8	468 453 496	40 59 47	12321 11561 12514	456 424 464	11 57 45	11993 11518 11778	450 422 436

3.6

3.6

3.6

3.6

 TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BA 21	RŁ		R	ECORU AV	ERAGE I	3Y 51R	E 8Y	FRESHENING	YEAR				
SIKE NO.	UAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.,		TEST PCI.		305-UAY RECORDS NO.			YEARLY H RECURDS NO.		FAT
						1958 1959 1960		TEIN 10424 13687 9425		372 480 315		11080 12330 11205	403 464 417	4 6 2	10794 12201 11522	387 457 416
1076010	29	74	11201	3.7	413	1953 1954 1955 1956 1957 1958 1959 1960	10 15 10 11	10378 10855 12127 11527 11356 10599 10232 10168	3.7 3.6 3.7 3.9 3.6	463 426	15 10	9978 11008 11329 11104 11125 9942 10552 11000	409 424 421 408 369 400	13 9 9	10268 10443 11263 11002 10955 10828 11795 12677	420 416 406 407 446
1076122	2	4	13637	3.2	436	1954 1957 1958		14640 13075 14570	3.2	446 414 496		13880 11165 13920	407	1	13233	471
1076799	198	388	11286	3.6	405	1953 1954 1955 1956 1957 1958 1959 1960	24 50	11234 11673 11152 11536 10c97 11436 11704 11415	3.6 3.7 3.1 3.6 3.6	400 421 405 421 393 414 418 407	23 48 40 62 79	10750 11276 11605 11655 10949 11305 11651	424 434 433 412		8868 10938 11441 11821 10688 11853 11943 12135	406 424 445 405 445
1078656	40	89	11750	3.7	432	1952 1953 1954 1955 1956 1957 1958 1959	11 16 19 8 10 10	13560 10622 11732 11383 9484 12349 13210 13759 14900	3.7 3.8 3.7	500 393 438 422 364 457 477 502 548	11 16 17 7 10 3	14620 11835 11661 11386 10376 11149 11598 12431 12258	437 432 427 393 405 442 459	15 18	11090 11592 11621 11747 11427 11736 13049 12835	427 437 441 418 440
1080777	900	1743	11894	3.6	432	1953 1954 1955 1956 1957 1958 1959 1960		11664 12041 12320 11596 12093 12186 12185 11511	3.6 3.6 3.6 3.6 3.7	421 438 444 421 437 442 446 420	153 207 159 248 335 445	11805 11723 12101 11652 11872 11995 12025 11730	438 455 439 448 452	139	11095 11587 11685 12064 11704 12233 12602 12596	432 436 454 440
1081270	105	176	11497	3.9	449	1954 1955 1956 1957 1958 1959	10	13100 12197 11604 11537 11713 11696 10903	4.1 3.8 3.9	506 492 444 455 446 457 431	9 10 25	12620 12309 11015 11687 11707 11446 11495	468 411 436 436 429	8 9	11674 12928 12546 11338 11885 11953 12040	462 423 439 444
1081684	158	295	10747	3.9	420	1953 1954 1955 1956 1957 1958 1959 1960	3 8 23 36 55 67 82 21	10663 9879 9765 10636 10935 11550 11257 11927	3.9	429 376 379 405 424 465 439 479	8 23	11793 11234 11734 11619 11516 11826 12148 12365	422 436	1 8 18 34 49 58 75	11227 11055 11455 11815 11550 12022 12488 12627	405 424
1081971	1	1	10010	3.7.	375	1955	1	10010	3.7	375	1	9130	381	1	10017	427
1082001	1	1	6410	4.6	295	1954	1	6410	4.6	293	1	8900	म स स	1	7150	363
1082020	233	298	13226	3.6	479	1958 1959 1960	58 200 40	12760 13288 12864	3.7 3.6 3.6	476 481 404	56 197 39	12814 12327 11804	486 464 447	50 180 39	12872 12880 12989	467 465 489
1082891	1049	1916	12098	3.9	470	1953 1954 1955 1956 1957 1958 1959	47 104 156 141 253 430 630 155	11122 11347 12158 11946 11966 12315 12531 12184	3.9 3.9 3.9 3.9 3.9 3.9 3.9	429 439 476 467 464 478 487 478	45 101 153 137 246 410 627 150	11547 11471 12120 11883 11752 12069 12048 11850	425 426 454 448 440 452 452 447	13 90 141 131 214 378 587 153	12107 11142 11418 12416 11609 12307 12633 12808	455 411 426 471 439 462 476 486
1083427	19	46	10737	4.1	432	1953 1954 1955 1956 1957 1958 1959 1960	9 8 6 7 4 5 4 3	10597 11095 11463 12364 11925 12130 12173 9707	3.9 4.0 4.1 3.9 4.2 4.0 4.3	413 435 469 484 495 478 512 410	9 8 6 7 4 4 4 3	11682 10539 11092 12036 10193 10388 10715 12057	436 420 429 458 416 444 447	2 8 6 7 4 4 4 3	10453 10634 11122 11839 11102 10118 10233 12157	416 420 437 451 463 444 440 505
1084039	593	1042	11897	3.8	450	1954 1955 1956 1957 1958	2 58 69 161 277	8970 12273 11467 11362 12244		403 459 435 429 464	2 57 69 159 263	11600 12032 11710 11938 12056	443 458 441 448 456	2 55 65 137 249	11456 11549 12045 11581 12086	408 436 458 441 456

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

392

OAUGHTER AVERAGE BY SIRE

	55 JIII EN					.,	LCOND AV		. 3110	_ ,.	T KE SHENTING	LAK				
SIRE ND.	OAUGHTERS ND.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NO.	L8.	TEST PCT.	FAT L8.	305-DAY RECORDS			YEARLY H RECORDS NO.		
						1959 1960	HOLS 373 102	TEIN 12151 12229	3.8 3.8	461 462	366 98	12128 11894	458 450	332 99	12642 12738	479 482
1085978	3 8	8	12999	3.8	491	1959 1960	5 3	13700 11830	3.8 3.7	526 432	5 3	12018 13207	474 485	5 3	12731 13683	510 505
1086326	329	513	12237	3.9	474	1957 1958 1959 1960	39 163 264 47	10990 12577 12517 12261	4.0 3.9 3.9 3.8	435 488 488 460	39 150 262 կկ	11281 11862 11792 11795	439 457 454 454	25 138 250 45	11570 12086 12410 12539	444 463 476 483
1086776	33	77	10811	3.7	401	1953 1954 1955 1956 1957 1958 1959	2 6 23 14 14 9 7 2	8955 10188 11061 11410 10803 10858 11681 8210	3.5 3.8 3.7 3.7 3.7 3.6 3.7	312 385 417 424 400 400 426 301	2 6 22 14 14 8 7 2	10955 12433 12180 12516 11839 12033 12057 9180	388 476 461 476 458 462 452 363	6 19 12 13 7 7 2	11603 12641 12361 11845 12756 12689 10977	416 474 475 457 492 481 426
1087974	28	35	11843	3.8	446	1958 1959 1960	6 22 7	13310 13204 8933	3.8 3.8 3.7	508 500 331	5 21 6	12102 11624 10328	442 430 391	4 20 7	12134 11982 12921	448 439 484
1087980	50	95	10905	3.8	413	1955 1956 1957 1958 1959 1960	23 20 19 16 12 5	11598 10789 10747 11189 11046 11596	3.8 3.8 3.7 3.8 3.7 4.0	438 410 395 427 409 463	22 19 19 15 12 5	11369 11212 11113 10905 11238 11878	423 419 413 423 433 456	20 15 14 14 12 5	11104 11441 11021 10646 11719 12745	416 417 409 402 453 493
108815	1 9	9	10734	4.1	433	1959 1960	5	11514 9760	4 - 1 4 - 0	475 382	5 3	10126 10477	385 377	5 4	11075 12053	426 444
1088707	7 29	70	11699	3.7	435	1954 1955 1956 1957 1958 1959 1960	6 15 6 9 12 15 7	13018 12545 10930 13473 12259 12816 11763	3.7 3.8 3.9 3.7 3.7 3.6 3.6	479 469 420 493 449 469 427	6 15 8 9 15 7	11855 11710 10565 10611 11746 11614 11576	448 449 428 408 445 431 441	6 6 6 9 14 7	11398 12047 11153 11501 11926 12477 12876	423 454 443 444 454 467 482
1088709	9 39	66	10957	3.6	394	1954 1955 1956 1957 1958 1959	2 11 15 13 11 11 3	11550 11038 10987 10083 11589 11545 11770	4.1 3.7 3.7 3.6 3.5 3.6 3.3	472 408 400 366 410 409 393	2 9 15 12 8 11 3	12360 12082 11693 10176 11160 12145 11713	482 456 441 386 421 454 418	1 9 13 11 7 10 2	11510 11691 11946 11167 12306 12317 11391	492 433 454 424 452 464 421
109000	223	415	10805	3.8	411	1953 1954 1955 1956 1957 1958 1959	2 30 47 38 73 89 109 27	10405 11321 11202 10481 10486 11309 11160 10810	3.9 3.8 3.8 3.8 3.8 3.8 3.7	400 425 427 400 401 429 424 406	2 30 46 36 72 82 107 26	12955 11163 11265 10911 10932 11340 11262 10060	456 415 424 402 405 423 424 373	25 43 37 61 79 94 27	10988 11142 11429 10755 11347 12129	406 416 430 405 422 454 438
109000	3 535	770	12005	3.6	434	1957 1958 1959 1960	30 211 397 132	12230 11885 12160 11776	3.7 3.6 3.6 3.6	452 432 439 423	30 201 394 129	11974 11632 11752 11685	444 432 434 431	26 181 368 129	11780 12212 12161 12535	441 455 449 464
109097	9 1	1	14530	3.5	502	1959	1	14530	3.5	502	1	11530	407			
109100	4 I	1	13680	3.6	486	1959	1	13680	3.6	486	1	12140	451	1	10475	39 8
109129	9 7	13	13576	3.5	472	1956 1957 1958 1959 1960	1 2 3 6 1	16970 16575 15413 12618 16640	3.5 3.5 3.5 3.4 3.3	588 577 536 432 550	1 2 3 6	12840 13460 12350 11057 12980	495 495 452 408 494	1 2 3 6 1	12295 13799 13396 13095 13919	485 535 485 483 528
109274	1 1	1	19750	3.5	697	1959	1	19750	3.5	697	1	11090	396			
1092/7	3 39	67	11690	3.6	424	1954 1955 1956 1957 1958 1959 1960	4 8 9 11 15 17 3	12393 12164 10914 10685 10927 12061 12537	3.6 3.8 3.7 3.6 3.7 3.6 3.1	447 466 404 384 409 436 384	3 8 8 11 13 17 3	13267 12074 12374 10580 11749 11101 10730	509 463 447 404 436 411 400	3 8 7 10 10 15 3	12499 12171 13038 11515 11718 12487 11965	466 459 496 428 434 456
109407	4 1	1	6540	3.5	227	1960	1	6540	3.5	227	1	7660	309	1	17048	681
109407	9 78	78	12715	3.8	481	1959 1960	59 19	13068 11616	3.8 3.8	495 437	59 18	12563 11356	483 431	56 19	13031 12673	
109492	1 107	157	10650	3.8	407	1953 1954 1955 1956	1 5 11 8	12270 10402 11948 10259	3.7 3.7 3.8 4.0	451 385 441 406	1 5 11 8	11370 11856 11905 10778	415 417 440 406	10 7	12437 12556 12359	440 454 479

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SLRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRL

	OAUGHTER	AVERAGE	84 21t	\L		R	ECURD AV	ERAGE 8	BY SIR	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY RECORDS NO.			YLARLY H RECOROS NO.		
						1957 1958 1959 1960	HOLS 22 43 50 17	7877 10745 10934 10930	3.9 3.8 3.8 3.8	384 412 420 416	22 40 50 17	11345 11935 11532 11963	431 444 432 460	18 35 45 17	12004 12038 11981 12895	449 451 452 492
1099477	1284	1667	12240	3.9	479	1957 1958 1959 1960	4 343 1044 276	10650 12264 12287 12244	3.6 3.9 3.9 3.9	384 476 482 478	3 330 1041 271	12630 11794 11693 11692	475 458 452 452	1 297 965 273	10758 12124 12337 12373	378 469 476 481
1101565	403	769	12031	3.7	439	1953 1954 1955 1956 1957 1958 1959	3 69 83 67 116 161 203 67	11323 12409 12514 11867 12036 11963 12497 11468	3.5 3.6 3.7 3.7 3.7 3.7 3.6 3.7	398 442 456 434 445 440 456 420	2 67 81 60 115 156 203 66	11050 12293 12030 11653 11642 11658 11930	384 446 439 430 435 435 435 435	1 62 72 65 107 134 192 65	12034 12030 12515 11720 11965 12355 12466 12841	447 455 434 443 460 460 481
1102436	931	1576	12123	3.8	461	1953 1954 1955 1956 1957 1958 1959	1 53 128 136 207 325 560 166	15030 12056 12500 11702 11760 12153 12393 11501	3.6 3.8 3.8 3.8 3.8 3.8 3.8	541 453 470 440 443 462 472 438	1 53 127 134 204 296 557 157	11740 11149 11870 11234 11390 11530 11492	402 414 440 421 426 435 431 425	47 120 123 168 284 508	10662 11522 12051 11635 11656 12253	396 425 454 437 440 461 467
1104657	12	26	10622	4.0	425	1954 1955 1956 1957 1958 1959	1 7 6 3 4 5	8360 10943 10997 10393 12033 12538	3.8 4.1 4.0 4.1 3.9 3.9	320 451 434 421 465 492	1 7 6 3 3 5	10970 11394 10605 11870 12037 11654	395 421 396 450 443 436	1 7 6 3 3 5	8905 11746 11365 12012 12303 13436	311 426 430 444 442 502
1104658	86	89	11469	3.9	448	1959 1960	56 33	11329 11562	3.9 3.9	443 452	54 31	11466 11225	434 425	50 31	11826 12045	448 457
1104797	481	848	11664	3.8	447	1953 1954 1955 1956 1957 1958 1959	1 25 31 49 104 180 357	16520 11802 11732 11552 11798 11873 11884 11657	3.7 3.9 3.9 3.8 3.8 3.9 3.8	614 456 456 443 451 458 452 440	1 25 31 49 103 168 357 98	12600 12184 12368 11978 11694 11826 11890 11759	452 440 453 440 433 442 440 437	1 22 28 48 96 148 343	14170 11701 12551 12109 11902 12454 12499	463 424 455 449 441 465 464
1105318	1	1	12740	4.3	552	1959	1	12740	4.3	552	1	12960	467			
1105728	1	1	11600	4 - 1	476	1959	1	11600	4.1	476	1	12760	469	1	12960	496
1106334		1	15400	3.7	565	1959	1	15400	3.7	565	· 1	13550	510	1	14116	547
1106775	102	165	11685	3.7	433	1954 1955 1956 1957 1958 1959	1 13 11 22 41 60 17	11720 11945 11075 11819 11616 11756 12735	3.9 3.8 3.8 3.7 3.7 3.6	456 456 415 440 429 435 461	1 12 11 22 41 60 17	13250 12468 11370 11910 11566 11658 11969	480 475 418 444 432 437 446	1 11 10 18 37 56 17	12077 12311 12576 11618 11504 12207 12804	444 459 460 440 428 456 477
1107436	1	1	7600	3.5	269	1959	1	7600	3.5	269	1	12970	490	1	12633	461
1108504	633	1041	11977	3.7	448	1953 1954 1955 1956 1957 1958 1959	2 49 85 83 112 199 386 125	12295 12777 12410 12393 11643 12175 12161 11885	3.5 3.7 3.7 3.7 3.8 3.7 3.7	427 468 461 461 434 455 454	2 47 84 80 111 191 383	8300 11716 11509 11278 10887 11188 11228 11062	358 433 435 426 410 424 425 415	41 75 79 88 170 351	11221 11217 12331 11213 11547 11847 12025	417 419 462 424 437 448 455
1109075	152	277	11251	3.6	409	1954 1955 1956 1957 1958 1959	20 34 29 47 56 69 22	11053 11173 11165 10911 10958 11510 11278	3.7 3.7 3.6 3.6 3.6 3.6	403 412 409 398 397 418 407	20 33 29 47 50 69	11425 11906 11745 11771 11311 11540 11652	424 445 424 432 416 423 424	18 31 27 42 46 63 21	11199 11283 11995 11162 11750 11911 13008	416 421 449 414 436 439 478
1109864	1102	1279	11319	4-1	462	1958 1959 1960	112 865 302	11735 11423 10826	4 - 1 4 - 1 4 - 1	477 468 438	110 861 286	11964 11797 11711	462 455 448	99 789 297	12186 12341 12269	470 476 475
1110594		1	13270	3.5	470	1959	1	13270	3.5	470	1	12230	443	1	14682	529
1111075	89	140	10318	3.8	386	1955 1956 1957 1958 1959 1960	7 11 23 30 56 13	10587 10601 9830 10106 10941 10728	3.5 3.1 3.7 3.7 3.8 3.8	367 393 359 375 409 411	7 11 23 26 56 13	10781 11722 11653 11207 11840 11288	423 435 436 421 447 417	4 11 19 23 53 13	11026 11726 11337 11570 12491 12310	426 437 423 439 468 461
1111076	106	178	12010	3.6	432	1954 1955 1956 1957	1 8 15 29	9250 12710 11035 11956	3.9 3.6 3.6 3.6	361 454 396 436	1 1 13 29	14450 11167 11110 11291	473 423 429 421	1 6 12 24	11521 11009 12483 11129	441 399 464 414

TABLE 15.--DAUGHTER-AVERAVE OF SIKLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

394

DAUGHTER AVERAGE 8Y STRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECURDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY RECORDS ND.		. AV. FAT LB.	YEARLY H RECORDS NO.		
						1958 1959 1960	HOLS 34 70 21	TE1N 11975 12375 12662	3.7 3.6 3.5	ттт ттт т30	31 70 20	11608 11638 11975	428 434 449	30 63 19	11710 12196 12401	439 454 459
111208	4 2	Ц	8468	3.9	334	1957 1958	2	9065 7910	3.9 3.9	364 304	2 1	9100 7940	319 274	1	10878 8219	36B 290
111221	1 4	4	13993	3.7	506	1959 1960	3 1	16120 7610	3.5 4.0	573 304	3 1	13537 10660	489 411	3 1	13276 11401	482 445
1113278	3 187	318	12090	3.8	453	1954 1955 1956 1957 1958 1959	1 11 26 43 76 123 38	11880 12560 11546 11559 11998 12443 12023	3.5 3.7 3.8 3.7 3.6 3.8 3.7	413 469 429 426 451 467 446	1 11 26 40 71 122 37	11390 11716 11020 11404 11946 12092 12034	415 431 418 425 443 450 453	10 23 35 63 118 37	11714 12261 11569 12128 12563 12719	429 455 429 452 469 483
111501	14 24	4	12628	3.7	467	1959	4	12628	3.7	467	4	12378	461	4	12263	453
111542	6 3	5	12298	3.8	465	1955 1956 1957	3 1 1	12090 14260 11590	3.9 3.1 3.6	472 522 414	2 1 1	11620 12070 12420	449 459 474	2 1	10933 12328	403 484
111542		1	13350	4.1	545	1955	1	13350	4.1	545	1	12940	483	1	12197	450
111568	7 4	6	10748	3.9	411	1957 1958 1959	1 2 3	11950 10870 10293	3.9 3.9	450 415 397	1 2 3	11090 10635 11557	399 385 444	1	10562 11663 15325	365 407 584
111870	9 16	31	10345	3.8	392	1954 1955 1956 1957 1958 1959	4 8 3 5 5 4 2	10995 9995 11910 9624 11098 11353 8175	3.8 3.7 3.6 4.0 3.7 3.7 3.2	412 368 428 362 412 411 273	4 8 3 4 5 4 2	12338 11606 11540 11900 11354 11805 8735	443 441 432 438 426 433 283	4, 6 3 4, 5 4 2	10622 11064 11180 11453 11717 12309 11892	378 416 427 416 432 456 422
111926.	3 2	6	12068	3.8	450	1954 1955 1956 1957 1958	1 1 1 2 1	9860 14030 13310 11755 12530	3.5 3.4 3.6 3.8 3.9	350 481 473 446 488	1 1 1 2	12680 14320 11770 11285	488 539 445 431	1 1 1 2	12328 13080 14094 11778	467 506 545 440
111951	4 128	203	12229	3.5	426	1954 1955 1956 1957 1958 1959	2 11 9 19 48 88 26	15425 13229 12859 12706 12601 12317 11731	3.4 3.5 3.5 3.5 3.5 3.5 3.6	5∠7 440 446 439 439 428	2 11 9 19 45 88 25	12195 11481 12211 11471 12022 11902 11663	458 426 462 421 445 449 434	2 10 8 15 41 79 25	11380 11728 13040 11495 12180 12415 12265	428 429 476 419 450 465
111968	5 12	27	11556	3.6	416	1954 1955 1956 1957 1958 1959	3 4 3 5 6 3	12497 12563 12800 9457 11126 11852 12840	3.5 3.6 3.6 3.5 3.6 3.7 3.6	433 455 459 328 407 442 460	3 4 3 5 0 3	12127 11257 10970 9747 10980 10702 11200	450 414 405 351 407 401 406	3 4 2 4 6 3	11198 11554 11778 9516 10579 11345 12070	412 424 445 350 383 425 445
111968	6 447	616	11911	3.9	459	1953 1954 1955 1956 1957 1958 1959	1 35 38 33 38 94 293	9460 11684 11589 11277 11264 12319 12224 11267	3.6 3.9 3.8 3.9 3.8 3.9 3.9	354 450 442 436 430 474 471 434	1 35 38 32 38 90 290 81	10530 11630 11219 11324 11367 11527 11525 11165	385 436 423 420 425 435 432 414	27 36 25 29 83 271 80	11118 11026 11336 11178 11664 12024 12052	419 415 432 418 440 453 450
112212	7 1	1	12110	3.7	453	1959	1	12110	3.7	453	1	11/00	432			
112226	6 567	648	11122	3.9	432	1954 1955 1956 1957 1958 1959	3 21 23 42 59 408 142	11327 11884 11338 11005 11534 11217	3.9	419 459 450 432 451 436 430	3 21 22 41 53 407 137	11040 11323 11416 11640 11591 11415 11392	412 443 445 451 451 442 437	2 20 21 34 47 368 140	11903 11194 11577 10680 11985 11975 12123	445 434 469 422 460 463 471
112226	7 52	(9	10531	3.6	380	1955 1956 1957 1958 1959 1960	3 5 12 18 38 3	11080 10192 11147 10529 10672 11913	4.0 3.4 3.7 3.7 3.6 3.4	442 347 396 388 382 417	3 5 12 16 36 3	10910 9582 11317 11068 11115 11443	440 353 429 423 421 440	3 5 11 14 36 3	11768 10327 11270 12070 11472 11354	461 370 426 458 428 428 439
112227	1 42	69	10468	3.B	397	1954 1955 1956 1957 1958	1 4 6 18 18	10960 11088 11775 10598 10112	3.7 3.9 3.8 3.8	390 468 456 400 382	1 3 6 18 18	11470 11603 11235 10646 10707	431 427 422 403 404	1 2 6 13 15	9221 11936 12130 11339 10947	364 442 468 431 417

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING-RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

	DAGOTTICK	ATERAGE	D. 311			K	ECOND AV	LRAGE 8	T 51K	E BY	FKE2HENING					
SIRE NO.	DAUGHTERS NO.	KECORDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.	L8.		FAT LB.	305-DAY (RECOROS NO.			YLARLY H RECOROS NO.	MILX	
						1959 1960	HOL 5 18 4	11493 8720	3.8 3.9	437 339	18 3	11542 11127	439 421	17	11807 10570	453 408
1123039	9 86	151	10638	3.8	40B	1955 1956 1957 1958 1959 1960	15 21 34 36 38 7	11683 11066 10291 11204 10309 12049	3.9 3.9 3.9 3.8 3.8 3.7	461 434 401 427 388 451	15 21 33 34 38 7	11743 11209 11218 11273 11578 11196	451 426 419 423 434 414	11 19 31 33 35 6	10974 11730 11324 11590 12293 12597	423 457 419 438 458 458
1123770	2	2	4205	3.8	164	1960	2	4205	3.8	164				2	11445	405
1123923	3 26	47	11180	3.9	436	1955 1956 1957 1958 1959 1960	3 10 11 17 4	9110 10695 10539 11544 12229 11500	4.3 3.8 3.8 3.9 3.9 4.0	398 407 400 455 475 452	3 2 10 10 17 4	10990 12245 12634 11514 11762 10368	442 457 481 438 450 399	3 2 9 10 14 4	12219 11331 11755 12179 12172 12214	458 423 437 462 459 463
1124915	36	42	9807	3.8	370	1958 1959 1960	6 30 6	11328 9334 9378	4.0 3.7 3.9	453 346 361	5 26 5	13476 11083 13354	502 412 505	5 20 5	13276 12806 13821	488 473 517
1125026	5 58	114	12132	3.7	448	1955 1956 1957 1958 1959 1960	2 12 16 37 37	13405 12418 11749 12263 12166 10990	3.7 3.8 3.0 3.7 3.7	493 452 441 445 453 404	2 12 16 35 37	11430 11675 10619 11171 11130 10331	439 429 399 414 414 392	2 10 14 34 36 10	10688 12632 11546 11358 11942 11332	414 454 438 424 445 445
1125395	5 105	157	11573	3.7	431	1955 1956 1957 1958 1959 1960	4 3 13 34 72 31	13503 13580 12562 11853 11430 10932	3.8 3.7 3.9 3.1 3.7 3.8	503 502 489 443 423 412	3 3 13 30 72 29	12430 / 11890 12320 11802 11970 12163		3 2 11 27 65 29	12045 12257 12077 11978 12511 12512	427 465 460 448 471 475
1125635	5 1	1	9240	3.8	354	1959	1	9240	3.8	354	1	9400	351	1	12666	475
1128308	3 534	934	11475	3.7	424	1954 1955 1956 1957 1958 1959	19 67 98 165 217 287 61	11531 11907 11320 11111 11798 11820 11871	3.6 3.7 3.7 3.7 3.7 3.7 3.7	418 444 416 407 438 441 434	19 65 97 164 200 283 80	12317 11697 11065 10962 11262 11207 11117	462 442 413 414 422 421 416	15 63 91 130 192 255 78	11488 11551 12011 10925 11437 11936 11926	440 432 447 412 429 449 449
1129792	2 1	1	14550	4.0	586	1959	1	14550	4.0	586	1	141/0	492			
1132993	3 207	318	12430	3.8	467	1955 1956 1957 1958 1959 1960	4 19 46 84 135 30	13043 11192 11619 12164 13028 12640	3.8 3.8 3.8 3.7 3.8	496 417 437 463 487 477	19 45 77 135 30	12023 11297 11368 11444 11665	428 419 433 431 437 447	3 19 35 67 122 30	12739 11922 11508 11847 12374 12662	452 450 450 444 464 467
1134627	2	2	10735	3.6	385	1955	2	10735	3.6	385	2	11060	418	1	9984	422
1134953	3 1	1	10240	3.8	388	1955	1	10240	3.8	388	1	10960	385	1	11685	437
1138797	7 210	277	11369	3.6	413	1956 1957 1958 1959 1960	4 33 52 147 41	11358 11085 11449 11656 11047	3.5 3.7 3.6 3.6 3.6	400 405 417 423 391	3 33 49 145 40	12197 11532 11553 11604 10688	439 433 430 435 405	4 47 136 40	13219 11407 11536 12307 12194	482 423 429 461 455
1140763	3 3	3	14367	3.5	50ช	1959	3	14367	3.5	508	3	12630	446	1	11380	438
1141306	5 1	1	13450	3.5	475	1959	1	13450	3.5	475	1	11060	380	1	12263	4/6
1 14 35 78	3	ų	11393	3.7	426	1957 1958 1959	i 1 2	11590 8790 11995	3.3 3.0 4.0	384 262 4 7 7	1 1 2	11400 10250 10510	395 354 378	1 1 2	10638 11946 11113	372 420 407
1145480	1	1	7190	3.6	260	1959	1	7190	3.6	260	1	10340	368	1	10726	384
1146343	3 2	2	11320	3.7	421	1959	2	11320	3.7	421	2	13250	484	2	13031	493
1149460) 4	ų	10690	3.6	388	1959 1960	2 2	10305 11075	3.6 3.7	371 404	2	10605 11905	395 431	2 2	12088 12094	434 436
1149833	3 1442	2230	12212	3.9	472	1954 1955 1956 1957 1958 1959 1960	74 137 121 233 465 913 287	11446 12084 11885 11941 12327 12484 11915	3.8 3.9 3.9 3.9 3.9 3.9	440 473 463 459 476 483 459	73 133 113 226 440 910 279	11/88 12141 12117 11778 12256 12215 11883	438 456 459 444 461 458 446	64 129 111 189 405 836 274	11604 11639 12458 11671 12451 12806 12807	431 439 474 448 469 483 484
115131	1 545	793	11234	3.9	432	1956 1957 1958 1959 1960	1 47 234 394 117	15660 11124 11215 11467 11283	3.5 3.9 3.9 3.9 3.8	547 433 434 442 431	1 47 227 393 112	10780 11837 11840 11640 11666	399 455 456 447 446	1 33 204 372 113	9668 11147 11958 12247 12139	424 431 463 470 471
1151349	9 13	15	12170	4.1	494	1957 1958	1 3	14020 13380	4.3 4.4	602 591	1	13280 13270	509 562	1	13320	557

TABLE 15.--CAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-0AY RECORDS NO.			YEARLY HI RECORDS NO.	MILK	
						1959 1960		TE1N 12547 11045	4.0 3.8	499 426	7	12510 13630	466 492	3 2	12219 12846	458 487
115186	3 11	12	11549	3.7	431	1958 1959 1960	1 8 3	11290 11426 12070	4.1 3.7 3.8	460 421 458	1 8 3	13090 12086 11050	465 449 406	1 8 3	12077 11596 13454	449 441 493
1152232	2 52	53	11356	3.9	448	1958 1959 1960	1 33 19	10740 11628 10987	3.2 3.9 4.0	338 454 443	1 33 18	9530 11742 11404	356 444 442	1 32 18	12568 12159 11888	447 456 458
115327	1 1	1	12790	3.8	485	1959	1	12790	3.8	485	1	9710	396	1	10780	449
1153740) 41	64	10686	3.8	403	1957 1958 1959 1960	1 19 35 9	14030 11094 10795 10731	4.1 3.8 3.8 3.6	577 423 410 389	1 17 35 9	9460 11885 11652 11824	378 444 441 439	1 16 33 9	11837 11761 12323 12272	476 442 462 459
115427	1 65	96	11494	3.7	425	1955 1956 1957 1958 1959 1960	1 3 10 25 47 10	10240 11017 10906 11696 11532 10732	3.7 3.5 3.6 3.7 3.8 3.5	376 393 396 430 432 372	10 23 47	12820 11300 11481 11319 11275 11644	470 424 436 436 433 426	3 8 21 41 10	11340 11154 11656 11726 12447	424 419 445 453 472
1154817	7 2	4	12987	3.8	492	1955 1957 1958 1959	1 1 1 1	13120 12850 13740 11970	3.7 3.9 3.8 4.0	479 502 528 484	1	9320 10460 10430	407 397 402	1 1 1	10017 9875 10366	427 382 389
1156059	31	35	11960	3.8	457	1958 1959 1960	2 28 5	11535 12236 11310	3.7 3.8 4.0	416 465 445	27 5	11085 11986 11646	424 454 449	2 25 5	11413 12686 13414	429 479 508
115644	7 254	364	12222	3.8	466	1957 1958 1959 1960	21 87 187 69	11745 12147 12375 12462	3.7 3.8 3.8 3.8	432 463 473 474	21 84 187 67	11571 11655 11978 11924	427 435 445 442	19 76 170 68	10901 121B8 12373 12561	406 461 460 470
115677	1 21	25	13874	3.9	540	1958 1959	6 19	15698 12879	3.8 3.9	597 503	5 19	13234 12420	503 481	5 19	14000 13091	541 508
115677	5 6	7	17177	4.0	690	1956 1957 1958 1959	3 1 1 2	21507 9920 12630 14370	4.0 3.8 4.2 4.1	868 379 526 583	3 1 1 2	19930 6710 10200 14900	747 246 394 560	3 1 1 2	18170 9668 12273 13947	686 363 470 529
115677	7 3	3	9507	3.8	357	1955 1957	2 1	8615 11290	4 • 1 3 • 3	348 375	2	9590 9860	340 355	2	11336 9668	402 363
115772	2 28	43	11066	3.7	409	1956 1957 1956 1959 1960	1 5 12 17 8	10360 11370 11388 11184 10534	3.1 3.9 3.7 3.6 3.8	318 437 420 407 401	5 10 17 7	10342 12540 11914 10190	390 473 441 405	1 3 9 16 8	15511 10337 12089 12185 12415	567 427 453 451 484
115780	5 1	1	12120	3.5	418	1960	1	12120	3.5	418	1	10620	377	1	11194	401
115798	5 268	271	12207	3.8	458	1959 1960	172	12384 11811	3.B 3.8	466 442	170 91	11853 11600	458 453	149 95	12451 12706	480 490
115805	0 348	582	12374	3.7	453	1955 1956 1957 1958 1959 1960	18 20 84 174 223 57	13258 13283 11949 12716 12591 12195	3.6 3.6 3.7 3.7 3.7 3.7	476 478 436 465 464 448	18 26 83 160 222 52	12903 12066 11724 12080 12074 12085	488 465 443 455 454 455	16 22 72 144 203 55	12660 12727 11716 12493 12539 13180	475 477 444 469 472 495
115916	1 58	58	11668	3.7	432	1959 1960	21 37	12223 11352	3.7 3.7	449 423	21 35	12176 11753	457 427	2 l 36	12388 12820	459 472
116041	4 1	3	10740	4.3	455	1958 1959 1960	1	9740 12040 10440	4.1 4.2 4.5	399 502 465	1 1	9850 11600 12240	371 431 463	1 1 1	95 9 2 12186 12219	346 453 486
116311	6 4	5	11604	3.5	409	1959 1960	1	11503 10630	3.5 3.5	407 36B	14 1	10798 11930	383 445	1	11214 12579	407 460
116401	4 10	13	13145	4.0	519	1958 1959 1960	3 8 2	12553 12915 13300	3.9 4.0 4.0	489 513 529	3 8 2	13690 12523 11985	510 477 470	2 8 2	13511 13157 11178	500 496 441
1 1640 1	8 26	39	10516	3.7	393	1956 1957 1958 1959 1960	1 5 12 16 5	11460 6550 10685 10863 11728	3.7 3.8 3.8 3.7 3.8	429 242 403 405 444	1 5 12 16 5	12870 10054 11734 11793 10958	454 374 432 441 415	1 8 13 5	12491 10083 11307 12287 11724	468 354 412 453 449
116495	7 16B	292	11493	4.0	463	1955 1956 1957	5 13 50	12130 11492 11675	4.0 3.9 4.0	475 449 465	5 13 49	12082 11824 11749	449 432 431	5 13 44	11615 12382 11782	459 463 437

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

3.9 477

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING DRGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECURUS NO.		TEST PCT.	FAT	305-DAY RECORDS NO.		. AV. FAT L8.	YEARLY H RECORDS ND.	MILK	
						1960	HDLS1	TEIN 10545	3.9	409	10	10666	406	11	12462	472
118686	6 1	1	7510	3.5	260	1959	1	7510	3.5	260	1	12370	465			
1187686	128	139	12930	3.9	503	1958 1959 1960	4 89 40	12653 12936 12566	4.1 3.9 3.9	524 501 488	4 89 45	12175 12325 11860	449 458 437	4 87 42	12601 12698 12807	464 474 475
1188418	3 1	1	14940	4.0	604	1959	1	14940	4.0	604	1	12860	494	1	13865	520
1189010	2	2	11415	3.6	408	1959	2	11415	3.6	408	2	12165	455	1	14497	550
118951	3 1	2	7845	4.1	321	1958 1959	1	7630 8060	4.2	322 319		10730 14320	380 525	1	9690	365
119015	1 40	49	11825	3.8	452	1958 1959 1960	10 30 9	11288 11941 12227	3.8 3.8 3.9	427 452 484	30 9	12233 12732 11818	469 474 445	8 28 9	12929 12606 12218	498 474 464
119039	5 2	2	8240	3.8	304	1958 1959	1	5540 10940	3.9 3.6	219 388	1	11560 9530	407 363	1	11053	425
1191920	5	7	15329	3.5	530	1957 1958 1959	1 2 4	17860 14220 14790	3.4 3.5 3.4	605 493 511	2	12075 12533	453 472	2	13870 14323	505 533
1192779	28	34	11755	3.7	438	1957 1958 1959 1960	3 8 19 4	8533 12783 11761 13240	4.0 3.6 3.7 3.8	337 472 428 506	3 7 19	11533 10254 11186 10895	449 388 420 402	2 6 14 4	8688 11474 12050 11944	330 434 452 441
119278	4 3	5	9692	3.6	352	1957 1958 1959	1 1 3	8290 7080 11100	3.8 3.6 3.7	314 255 412	1 1 3	10930 8600 12357	415 319 463	1 1 3	10497 12230 13421	375 444 502
119278	9 8	в	8036	4.2	336	1959 1960	3	8720 7626	4.2	364 319	3 5	12767 10500	460 397	3	12317 12181	447 456
119294	6 6	8	9537	3.9	364	1958 1959 1960	1 6	11090 9303 14740	3.9 3.9 3.4	430 359 505	1 6	13120 11253 12250	488 419 432	1 6	11314 11527 12481	419 428 452
119393	4 28	34	13085	3.6	471	1958 1959 1960	6 24 4	12562 13123 12725	3.8 3.6 3.8	479 470 476	6 24 4	12083 11603 10808	434 429 402	6 23	12103 12270 12238	443 453 457
119416	5 2	3	12020	3.9	466	1958 1959	1 2	8680 12760	3.8	333	1 2	13090	469	1 2	13091	475 454
119416	6 22	32	11148	4.0	446	1957 1958 1959	2 11 15	10725 10886 11960	4.1 4.0 4.0	429 434 479	2 11 15	10775 12556 11438	427 473 434	2 11 14	10573 12444 12518	439 473 473
			10.7		2011	1960	4	9763	3.9	376	łą.	11383	449	ta	11589	458
119558	6 14	22	10636	3.7	398	1957 1958 1959 1960	5 9 7 1	11030 11723 10986 12930	3.7 3.8 3.7 4.7	414 445 414 602	5 8 7 1	12860 13224 11763 15960	482 493 442 651	4 7 7 1	12579 13425 12954 13592	473 493 479 547
120028	8 16	22	11035	3.9	429	1958 1959 1960	5 14 3	10524 11346 10350	4.3 3.8 3.6	447 428 369	4 14 3	10755 11241 12103	408 414 467	14 14 3	10824 11936 12201	406 446 466
120028	9 1	1	9330	4.3	406	1959	1	9330	4.3	406	1	10340	405			
120213		1	9340	4.0	375	1959	1	9340	4.0	375	1	10220	384	1	7957	294
120227	5 11	11	11061	3.9	429	1959 1960	5 6	12800 961∠	3.9 3.9	495 374	5	11878 13380	442 488	žą žą	12298 12712	472 476
120304	6 8	16	12058	3.8	456	1957 1958 1959 1960	3 6 5 2	11890 12512 11980 13520	3.8 3.7	443 479 444 540	3 5 5 2	9750 11746 12948 13420	375 446 481 511	1 6 4 2	11576 12657 14380 12366	431 480 540 465
120330	5 68	123	11416	3.7	417	1956 1957 1958 1959 1960	18 36 47 18	11053 11968 11414 12004 10986	3.9	427 439 416 439 400	4 18 35 46 17	10968 11878 11639 11584 11496	407 449 435 431 425	4 17 34 44 17	12260 10715 11749 12252 12071	402 440
120405	2 1	1	13830	3.4	467	1959	1	13830	3.4	467	1	11700	415	1	14105	504
120439	9 2	7	8340	3.8	313	1956 1957 1958 1959	1 1 2 3	9840 8560 9840 6347		330 321 371 247	1 1 2 2	8640 7710 9295 9180	305 279 345 339	1 1 2 2	10737 8404 9342 9985	360 308 336 371
120451	5 210	261	11640	3.8	440	1958 1959 1960	52 164 45	11448 11761 12112	3.8	431 448 450	51 163 44	11628 11825 11285	447 447 422	48 159 44	11833 12419 12026	457 470 455
120474	9 1	1	7710	3.4	265	1960	1	7710	3.4	265	1	9490	345	1	11325	420
120661	7 1	1	15340	3.9	595	1959	1	15340	3.9	595	1	11740	430	1	13287	497
121029		2	14580		535	1959	2	14580	3.7	535	2	13020	508	2	12851	499
121047	1 39	54	10070	3.9	388	1958	6	9630	4.1	392	6	12300	459	6	12828	478

10541 4.2

3.9 409

4 38

45 1

TABLE 15.--OAUGHTER-AYLRAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPEO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

DAUGHTER AVERAGE BY SIRC

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	KECORDS NO.	MILK L8.	TEST PCT.	FAT LB.	305-DAY RECORUS NO.	CONTEMP MILK LB.	AV. FAT L8.	YEARLY HE RECORDS NO.	ERO AVE MILK LB.	RAGE FAT LB.
						1960	HOLS	TEIN 11405	4.2	468	4	11970	440	4	12947	471
1240095	13	13	10791	3.5	384	1959 1960	11	10847 10480	3.5 3.7	379 408	11 1	11019 12080	403 441	10 2	11782 13914	435 515
1240125	5 1	2	12475	3.6	444	1958 1960	1	12830 12120	3.6 3.5	467 421	1	11760 11720	409 403	1	11946 12546	420 438
1243106	80	125	126 15	3.9	487	1958 1959 1960	32 69 24	12355 12420 13608	3.9 3.9 3.8	475 487 518	31 69 24	11868 11788 12398	45 <i>1</i> 454 468	27 65 23	12165 12254 12687	465 472 491
1245520	1	1	13000	4.0	523	1959	1	13000	4.0	523	1	12330	448	1	12960	496
1246450) 16	19	10223	3.8	390	1958 1959 1960	1 14 4	12480 10651 8080	4.0 3.8 3.6	497 405 299	1 14 4	12030 12136 8225	463 460 320	1 13 4	12110 12541 11777	452 472 452
1248311	441	591	11824	3.7	440	1957 1958 1959 1960	1 121 355 114	14500 12716 11836 10842	3.5 3.7 3.7 3.8	513 474 438 407	1 117 350 109	9140 12292 12129 11423	327 468 458 434	1 105 324 111	9766 12333 12629 12442	352 473 478 475
1249434	1	1	9490	4.2	403	1960	1	9490	4.2	403	1	11250	444	1	12720	507
1255099	2	3	10850	3.7	398	1958 1959 1960	1 1 1	11560 10580 10630	3.7 3.7 3.6	424 394 387	1	11500 11980 9420	431 440 352	1 1 1	12295 12753 10181	455 469 382
126046	1 85	86	12170	3.9	479	1959 1960	53 33	12588 11363	3.9 4.0	491 455	53 30	13215 12688	505 487	50 32	13676 13372	522 514
1260630	24	27	10411	4.1	432	1958 1959 1960	2 19 6	8200 10411 10972	3.5 4.1 4.4	299 434 474	19 6	10985 11822 11670	400 435 449	18 6	12208 12935 13685	452 479 528
1261298	3 2	2	12830	3.6	462	1959	2	12880	3.6	462	2	12785	473	2	13342	489
1261857	7 10	12	18107	3.8	687	1958 1959 1960	3 6 3	18337 17995 17967	3.4 3.9 3.8	635 697 687	3 6 3	17470 17170 17083	679 664 666	3 6 3	17277 15916 16462	668 614 644
1262324	4 1	1	11740	3.4	399	1959	1	11740	3.4	399	1	12750	475	1	12960	496
1263834	4 1	1	12530	3.5	432	1959	1	12530	3.5	432	1	12180	448	1	11652	412
1264447	7 16	17	10953	4.0	434	1959 1960	11 6	10845 11197	3.9 4.0	424 450	11 6	11602 11050	437 408	10	1224 <i>2</i> 13034	462 496
1266373	3 68	70	11799	3.8	442	1959 1960	58 12	11747 12053	3.8 3.7	440 450	58 11	12288 12222	454 447	55 11	12670 13015	465 480
1266978	3 51	51	10210	3.6	370	1959 1960	23 28	11411 9223	3.6 3.6	412 335	23 25	11869 10665	448 406	18 28	12201 12292	465 468
1269686	6 3	3	12333	3.7	459	1960	3	12333	3.7	459	3	11927	451	3	12898	492
127101	9 18	18	13497	3.8	517	1959 1960	11 7	14747 11533	3.9 3.7	575 426	11 7	13590 11621	519 440	8 7	13897 12586	533 475
127313	2 39	39	11486	3.7	427	1959 1960	29 10	11650 11009	3.7 3.7	434 406	29 10	12227 13306	448 487	26 10	12809 13955	469 509
1276888	В 1	1	5120	3.5	181	1960	1	5120	3.5	181	1	6180	222	1	13941	524
127689	lş lş	4	11900	3.7	426	1959	4	11900	3.7	426	4	13493	499	14	14222	519
127695	9 14	14	11874	3.7	445	1959 1960	3 11	9703 12466	3.6 3.8	348 471	10	12743 11970	498 466	3 11	13215 12531	519 486
127835	3 1	1	12910	4.4	566	1960	1	12910	4.4	566	1	12860	503	1	12753	498
127972	3 32	32	12632	3.9	490	1959 1960	11 21	12410 12749	3.9 3.9	475 498	11 21	13010 12268	484 454	10 21	12923 12894	488 479
128708	9 1	1	4960	4.2	209	1960	1	4960	4.2	209				1	15173	610
129029	3 7	7	8907	3.7	330	1959 1960	4 3	7503 10780	3.7 3.7	280 397	3	13125 10653	494 409	4 3	12840 11129	487 418

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY SI				ECORO AVE		BY SIR	E 8Y F	FRESHENING	YEAR				
SIRE (DAUGHTERS	RECOROS	MILK	TEST	FAI	FRESH	RECOROS	MILK	TEST	FAT	305-0AY C	ONTEMP MILK	. AV.	YEARLY HE	RO AVE	RALE FAT
NO.	NO.	NO.	LB.	PCT.	L8.	YEAR	NO. JERS	L8.	PCT.	LB.	RECUROS NO.	LB.	LB.	NO.	F8.	LB.
357879	1	1	6220	4.6	286	1947	1	6220	4.6	286						
36∠559	21	59	7901	5.2	409	1949 1950 1951 1952 1953 1954 1955 1956	6 13 13 7 4 7 6 2	8913 8130 7829 7871 7390 8464 8643 11175 6530	5.3 5.5 5.5 5.5 5.5 5.5 5.0 4.9 3.9	471 429 425 423 408 442 433 551 255	3 3 3	9640 7857 8493 8007 7190 8072 8502 10790	429 451 428 377 422 439	2 3 5 2	7903 8306 8450 9936	445
368454	1	1	9500	5.6	528	1947	1	9500	5.6	528						
370551	\$	41	8594	5.3	458	1948 1949 1950 1951 1952 1953 1954 1955 1956 1958 1959	5 7 5 6 5 4 4 2 1 1	8082 9257 8474 9200 8378 8565 9975 9175 8800 9230 11710	5.5	452 511 470 516 457 465 511 473 523 408 580	2 4 3 4 4 1 1	8870 9000 8200 8515 7967 7975 8278 8685 8690 7350 8720	459 476 447 440 459 474 517 389	2 4 2 1 1	7690 8546 8470 7783 8993 7510	467 469 448 519
371000	1	5	7068	6.3	445	1949 1950 1951 1953 1954	1 1 1 1	8190 6320 7610 7080 6140	6.1 6.4	515 405 461 455 390	1 1 1 1	7160 8310 7660 7000 8110	390 447 377 358 416	1	7619 7052	
371077	1	10	9307	4.9	457	1949 1950 1951 1952 1954 1955 1956 1957 1958 1959	1 1 1 1 1 1 1 1	\$1170 9160 9680 9150 7600 10170 9530 8770 9740 8100	5.2 4.7 5.0	536 473 458 454 391 516 449 414 488 386		6930 6330 6140 6390 7030 6960 7210 6920 6300	327 315	1 1 1 1 1	5930 6431 6071 6998 7074 7085	327 301 355 362
380552	24	79	8246	5.4	443	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	5 20 10 6 9 7 7 7 1 2 2	8324 8154 8523 8725 8669 8416 8209 8739 8220 8500 7520 7180	5.3 5.3 5.4 5.2 5.2 5.0 5.1	426 453 462 458 463 446 433 450 430 419 373 399	2 / 3 3 3 3	7725 8876 7810 6890 7863 7953 8680	512	3 3 3	7725 7968 7917 9897 8687	431 448 449 472
381057	34	94	7189	5.4	386	1948 1949 1950 1951 1952 1953 1954 1955 1956	5 9 11 15 20 14 7	7446 7679 7675 8238 6945 7320 6444 6696 8310 8700	5.3 5.6	407 414 418 457 387 388 347 357 463 446	1 2 1	7930 5500 8240 7725 7940	413 277 446 424 434	2	6982 7347	383 400
384546	24	62	7492	5.4	403	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1959	13 12 11 5 7 6 3 2 1	7513 7631 7412 8202 7096 6950 9183 8920 6980 7300 9370	5.5	397 412 409 452 371 364 485 491 424 453 460	2 2 2 3 3 3 2 1	8065 8350 7250 7040 8233 7850 7710 7350	394 429 384 368 426 430 430 379	2 1 1	7859 7652 7783	417
386656	1	2	4470	5.6	251	1951 1952	1	5040 3900	5.7 5.5	286 213						
390864	ų	11	9151	5.3	484	1951 1952 1953 1954 1955 1956 1957	1 1 2 1 2 1 1	9050 10420 7820 10600 9455 9660 9560 9940	5.5 4.9 5.7 5.0 5.2 5.0 5.2	500 509 440 530 489 481 499 542	1 1 1 1 2 1 1	6730 8240 6840 11830 8840 9090 9300 8840	350 401 353 601 466 469 506 471	1 2 1 1	8317 9080 8840 9123 9167	423 480 446 497 496

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRĒ NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY C RECORUS NO.			YEARLY HE RECORDS NO.		
						1959	JER:	EY 11110	5.5	615	1	8060	437	1	8655	463
39373	9 59	158	7041	5.3	403	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	8 26 36 23 21 18 10 8 5 2	6878 7921 7722 7861 8273 7745 8378 7196 8386 7030 6760	5.2 5.3 5.3 5.3 5.3 5.3 5.3 5.4 5.5 4.7 5.8	362 416 411 420 440 413 441 383 464 332 389	2 2 5 7 7 7 6 3 2	5890 7750 7360 7109 7736 7023 7532 7713 7175	201 400 391 371 400 357 387 408 392	2 6 3 2	6791 7381 7230 7570	349 361 372 396
39518	9 144	394	7461	5.0	373	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	15 31 47 47 62 59 52 37 22 13 6 3	8195 7743 7686 7567 7772 7262 7315 7730 7258 7230 6747 6483	5.1 5.0 5.1 5.0 5.0 5.0 4.9 5.0 5.0 4.9	416 387 386 384 390 363 361 384 364 359 325 299	2 4 12 17 24 30 24 23 12 8 2	8130 8278 7434 7936 7797 7089 7568 7762 7336 7469 8115 7270	428 432 403 417 405 369 385 391 386 379 428 357	11 19 22 13 6 2	7594 7362 7904 7612 7688 7925 7227	394 378 407 400 399 408 367
39520	В І	1	6060	5.2	315	1947	1	6060	5.2	315						
39884	0 i	6	8920	# " #	391	1949 1952 1953 1954 1955 1956	} 1 1 1 1	8920 10060 9040 7020 9890 8590	4.5 4.7 4.4 4.1 4.2 4.3	404 470 395 286 417 372						
39887	0 245	658	7194	5.2	373	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	23 62 58 66 88 99 94 72 35 23 21	7874 7495 7523 7520 7578 6966 7551 7333 7661 7953 6780 7702 8138	5.2 5.3 5.2 5.1 5.2 5.2 5.2 5.1 5.1 5.2 4.9	406 392 390 386 390 363 392 381 392 400 350 374 395	5 9 12 22 30 36 43 37 19 8 5 2	8304 7544 7841 8342 7975 7660 8080 7858 7868 7840 7983 8164 8500	434 402 416 442 416 400 417 412 422 404 415 413	5 37 37 21 14 6 5	9152 7645 7880 7713 8343 8391 8807 8644	447 399 414 404 422 447 452
40311	2 1	1	6240	6.5	405	1954	1	6240	6.5	405						
4063 I	1 1	6	7657	5.4	415	1951 1952 1953 1955 1957 1958	1 1 1 1	7330 8040 7580 8420 7390 7180	5.5 5.6 5.2 5.2 5.2 5.9	406 447 397 434 433 370						
40910	0 6	9	6084	5.0	301	1951 1952 1953	4 4 1	5933 6390 6860	4.8 5.0 5.2	283 318 360						
40954	3 7	22	7026	4.7	328	1948 1949 1950 1951 1952 1953 1954	1 1 2 5 5 2 4 2	7010 6570 7380 7298 6710 7435 6895 5810	4.6 4.6	417 392 387 347 318 335 312 269						
40975	9 2	2	6110	5.6	342	1947 1950	1	6340 5880		394 289						
41008	8 53	151	7081	5.1	357	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	12 33 33 28 20 14 1 3 3	6975 7440 7256 6978 7410 6981 8120 8887 9223 8733 10670	5.3 4.9 5.2 5.0	366 366 374 347 370 352 462 458 453 423	2 8 11 13 6 1 3 2 2	6630 7141 7862 7404 7439 7920 8670 8177 8470 8065 7910	372 402 386 378 425 438 446 425	4 9 6 1 3 2 2 1	7230 7394 7974 9091 8006 8355 8590 9036	383 389 420 471 433 450 458 485
41043	i7 I	2	4645	5.6	258	1953 1955	1	4150 5140	5.9 5.2	246 269						
41045	68 3	5	5598	5.1	281	1947 1949 1951	1 2 1	3780 6230 4770		192 325 231						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDIN, ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE 8Y SIRE

SIRE NO.	DAUGHTERS NO.	RECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.		305-0AY C RECORDS NO.		FAT	YEARLY HI RECOROS NO.		FAT
						1953	JERS 1	5960	5.1	302						
41148	3 3	6	7428	5.1	384	1954 1955 1957 1958	3 1 1	7100 7760 9100 9660	5.1 5.9 5.2 5.0	370 457 478 487						
411919	5 12	22	6447	5.3	339	1951 1952 1953 1954 1955 1956 1957	3 5 6 4 1 2	5613 7358 6312 7180 10720 7445 9060	5.3 5.4 5.6 5.7	272 387 332 387 597 423 514	;	8950 8780				
414190	0 82	234	7641	5.3	# O rt	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	6 23 30 34 34 40 21 12 15 10 6 3	8150 7648 7335 7804 8012	5.5 5.4 5.5 5.2 5.3 5.2 5.2 5.2	415 449 427 442 402 379 407 414 420 396 396 317	1 7 10 10 15 17 10 5 5 4 4 2	8360 8336 7898 7691 7224 7312 8203 8612 7554 8248 8615 9215	478 450 435 392 395 452 485 405 456	5 16 11 5 4 4 4	7120 7196 7963 8585 8064 8892 9688 9663	391 435 476 420 484 527
415055	5 46	130	7273	5.2	376	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	6 24 23 24 17 13 10 6 3 2	6162 7353 7487 7516 8004 7696 7944 7352 7530 6500 8020 5010	5.1 5.3 5.2 5.2 5.2 5.4 5.3 5.5 5.9	320 374 391 386 423 400 410 392 401 354 475 294	2 4 6 4 5 7 4 2	6985	359 404 427 390	2 5 4 2 1	11336 8040 8034 8535 7499	419 424 447
416190	5 91	247	7169	5.3	380	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 18 28 47 45 42 27 20 9 6 3		5.4 5.2 5.3 5.4 5.4 5.3 5.4	359 367 390 386 402 404 413 440 462 446 414	1 2 4 6 7 14 10 9 2 5 3	8338 7615	331 424 411 422 412 398 440 402 468 469	2 7 9 2 3 2	13898 7715 8341 8473 8589 8306	403 441 424 452 461
#14548	8 44	98	7105	5.2	368	1951 1952 1953 1954 1955 1956 1957 1958 1959	10 22 24 14 12 0 4 3	7506 7323 7001 7957 8628 8197 9443 9413	5.2 5.1 5.3 5.3 5.4 5.5	382 378 358 423 459 441 513 464 389	1 8 14 10 7 5 3 3	9800 8681 8129 7619 8067 8340 7543 7403 9005	487 438 427 422 483 444	5 10 6 5 3 3	7800 7867 8555 8160 7874 8382 7750	434 483 453 465 491
423510) 14	37	5633	5.4	303	1948 1949 1950 1951 1952 1953 1954 1955	2 3 7 2 2 8 8 4	6461 6253	5.6 5.6 5.4	341 325	2 1 1 5 6 3	8130 8470 6770 7390 6510 7050 7420 6710	443 332 401 361 389 422	1 6 3 1	6551 6271 7005 7292	343 373
42524 (0 6	20	7128	5.6	408	1948 1949 1950 1951 1952 1953	4 3 3 2 2 2	8100 7550	6.0 6.1 6.1	487 456 481 455 516 420 282	1 1 1 1	6450 6700 7200 7550 6290 6510	418	ì	7085	405
425960		ı	6080	5.7	349	1955	1	6080		349						
42606	5 8	21	6839	5.3	360	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 6 1 3 3 2 2 1 1 1 1 1 1	7040 7910 7060 6810 7790 6440 8330 6490	6.1 5.0 5.9 5.5 5.4	383 413 386 379 455 350 346	1 2 1 3 3 2 1 1 1	8350 8310 7550 7777 7243 8065 7750 7280 7640 7890 7920	454 398 421 401 447 433 379 397 412	2 1 1	7859 7652 7783 7695 8785	417 425 408

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	UAUGHIERS NU.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.	LB.	TEST PCT.	FAT LB.	305-DAY C RECORDS NO.			YEARLY HE RECORDS NO.	MILK	
42754	4 40	111	7154	5.5	391	1948 1949 1950 1951 1952 1953 1954	12 26 21 18 13 13	6767 7771 7277 7070 7175 6726 6363 3860	5.7 5.5 5.4 5.5 5.6 5.3 5.3 4.9	382 423 392 388 404 358 339 188	5 5 6 8 8	8284 7238 7670 7610 7046 6845 4140	448 401 419 422 378 381 209	ì 6	6595 7 022	374 385
42774	9 54	130	8312	5.1	420	1953 1954 1955 1956 1957 1958 1959 1960	1 5 15 30 34 33	9480 8980 6848 7611 8509 8643 8779 9104	5.7 5.6 5.5 5.1 5.2 5.0 5.1 4.8	543 505 379 392 439 433 444 435	2 9 16 17 16 3	7030 7901 8149 8115 7826 6573	379 423 440 433 428 371	2 13 17 17 15 3	7734 8302 8437 8567 8470 7735	414 437 438 459 451 409
4286 2	0 3	6	7262	5.1	368	1947 1948 1950 1952 1954	1 2 1 1 1	7340 7890 9060 7710 5490	4.8 5.0 5.0 5.6 5.1	350 389 457 435 283	;	7310 7430	385 388	1	7630	408
43181	9 1	1	5090	5.6	287	1954	1	5090	5.6	287						
43213	8 1	2	9350	5.6	522	1949 1950	1	9250 9450	5.7	524 520						
43262	9 1	5	8806	5+1	454	1954 1955 1956 1957 1958	1 1 1 1	9480 8860 8630 8000 9060	5.3 5.3 5.2 5.0 4.9	507 466 448 401 448						
43417	0 1	1	6400	5.7	365	1954	1	6400	5.7	365						
43477	3 60	155	6667	5.1	339	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	7 23 25 28 21 16 18 8 4 3	6726 6501 6972 6682 7249 6688 7204 7899 7675 8060 6375	5.1 5.3 5.2 5.1 5.1 5.0 5.0 4.8 4.9 4.9	337 344 365 339 370 335 360 387 370 394 298	1 3 3 6 5 6 11	5770 7333 7377 6895 7492 7223 7116 7152	362 389 425 362 391 378 368 354	3 8 5 1	9065 7035 6976 9200	402 366 351 364
43477	8 189	462	6869	5.3	361	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	23 56 93 107 76 36 28 23 16	6544 6713 6811 7015 7620 8174 7813 7680 7743 8860	5.3 5.4 5.3 5.3 5.2 5.2 5.2 5.2 5.2 5.3	342 361 361 370 398 428 407 399 401 430	6 21 46 51 35 18 8 7 6	7740 7974 7648 7835 8084 8544 8175 8093 7327 8435	409 427 409 415 428 457 433 436 396 458	15 46 34 21 11 5 6 2	7917 7664 7888 8407 8261 8410 8509 9271	423 405 422 440 440 461 467 507
43487	8 2	12	8042	5.0	405	1949 1950 1951 1953 1954 1955 1956 1957 1958 1959	1 1 1 1 2 1 2	9590 9060 9150 7710 9040 7280 6890 7905 8060 4930	5.2 4.9 4.7	490 524 454 381 455 381 340 368 390 209						
43495	1 16	28	6721	5.6	376	1953 1954 1955 1956 1957 1958 1959	7 11 4 1 2 2 1	6734 6501 7200 6080 7555 7495 9210	5.4 4.5 4.8	401 367 383 327 364 361 396	3 5 1 1 1	7260 7906 8430 8420 7410 7560	391 391 398 471 402 393	1 3 1 1 1	9014 7071 8513 8993 9047 8709	361 404 463 496
43515	կ 22	45	6826	5•1	347	1952 1953 1954 1955 1956 1959	11 8 11 9 1 2 3	7607 6470 7195 6014 7740 7505 7500	5.3 5.2 4.6	401 314 360 313 354 369 357	7 5 7 5 1	8314 7286 8017 7710 6890 9110	454 389 438 431 370 487	3 7 5	8084 7851 7920 7990 8502	441 431 440 451 475
43677	6 1	6	7603	4.9	375	1951 1953 1955 1956 1957	1 1 1 2 1	8690 8560 8920 6860 5730		436 430 413 343 284						

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

		AVERAGE					ECURD AVE		BY SIR	L BY	FRESHENING	YEAR				
			01 31			,	LCORD AVE	NAGE I	D1 31K		305-0AY (. AV.	YEARLY HE	RO AVE	RAGE
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		PCT.		FRESH YEAR	RLCOROS NO.				RECORDS NO.		FAT		MILK	
							JERS	ŁΥ								
438225	10	32	6408	5.1	326	1949 1950 1951 1952 1953 1954	4 8 7 7 3 3	6328 7079 6689 6126 5793 6520	5.0	319 351 334 308 288 329	1 2 2 2 1 2	7250 7035 7675 7110 5540 7650	374 378 390 366 285 399	1 2	6791 6246	347 320
438877	2	6	7803	5.2	402	1953 1954 1955 1957 1958	1 2 1 1	9410 7855 8530 8050 8650	5.4	470 415 458 402 429	1	7130 8410	359 436	1	6878	342
439545	. Lą	11	8322	5.5	458	1952 1953 1954 1955 1957 1958 1959 1960	1 1 1 1 1 1 3 2	9210 8000 8360 5270 9380 8630 8640 8085	6.3 6.8 6.0 6.2 5.7	461 404 524 358 562 551 491 428	1 1 1 1 1 5 2	10760 8760 8810 8770 9310 8870 9203 9910	546 460 479 478 504 471 462 476	1 1 1 1 3 2	9548 8993 9123 9167 9153 9211	435 497 496 462
439588	14	31	7 921	5.6	444	1949 1950 1951 1952 1953 1954	3 9 6 5 6	9223 7742 7597 8222 7992 8855	5.0 5.7 5.6 5.5 5.6 5.6	522 446 428 457 447 498	1 1 2 2 5 2	9720 9120 8755 8035 8682 8335	568 543 485 448 474 447	1 2	7695 8426	
439835	21	62	7556	5.3	398	1948 1949 1950 1951 1952 1953 1954 1955 1957 1959	8 13 12 8 6 8 4 1	8256 7550 8240 6926 8248 8279 8635 9720 10760 9860	5.3 5.2 5.4 5.2 5.2 5.3 5.4 5.2	425 396 423 377 424 430 460 521 563 511	1 2 3 3 3 3 2 1 1	8400 9360 9523 8610 8030 7703 7565 10180 8710 8160	468 552 541 492 454 430 444 582 492	1 2 1 1	8295 8219 8698 9723 8535	446 460 491 548 476
440103	1	1	7060	5.7	404	1959	1	7060	5.7	404	1	8460	436	1	9091	470
440119	6	12	6914	5.3	365	1950 1951 1952 1953	5 4 2 1	6410 8243 7485 8300	5.4 5.1	347 437 375 377						
440997	17	iţ tţ	7323	5.6	404	1953 1954 1955 1956 1957 1958 1959 1960	9 10 7 3 5 4 3 3	7376 7716 7633 7500 6128 5380 7150 6257	5.7 5.8 5.7 5.4 5.7 5.8	384 437 445 431 335 303 412 356	4 3 3 2 2 1 1	7760 7890 7837 7890 8405 6900 7470 7550	353 427 425 436 449 354 377 401	3 3 3 2 2 1 1	7928 7561 7946 7794 6339 7194 7434 7826	397 433 438 339 377 390
441643	1	7	6897	5.7	392	1951 1952 1953 1954 1955 1957	1 1 1 1 1	7580 7540 6360 7280 5020 6760 7740	5.8 5.6 5.9 5.8 5.5	431 441 357 428 290 370 430	i	8380	432			
442023	5 7	14	8684	5.4	465	1953 1954 1955 1956 1957 1958 1959	1 3 4 1 1 1 2 1	11180 7643 9860 11950 7800 5640 8905 8720	5.0 5.4 5.1 6.2 6.1 5.4	592 385 529 610 484 344 478 489	1 1 1 2 1	8700 8730 10500 9980 8570	394 419 463 512 471	1 1 2 1	13898 8796 10377 9238 8905	461 504 483
443103	33	81	7738	5.6	429	1950 1951 1952 1953 1954 1956 1956 1957 1958 1959 1960	3 8 11 14 12 11 8 6 4 3	8433 8375 7608 7592 8211 7167 7526 6747 7125 9430 8400	5.6 5.8 5.7 5.7 5.6 5.3 5.5 4.8	465 473 433 442 467 407 420 358 387 453	1 4 8 6 4 4 2 2 2	6640 8225 7988 7439 8142 7275 8628 7245 8120 7370	362 433 430 401 440 386 440 362 422 379	2 6 4 5 3 2 2	7761 8177 7518 8119 8495 7636 8192	448 392 435 437
443126	12	28	6986	5.7	398	1952 1953 1954 1955 1956 1958	7 9 5 4 2 1	7831 6774 7370 8223 7020 7880	5.5 5.7 5.5 6.0	458 380 420 451 423 487	5 4 3 2 2 1	7898 7203 7027 7630 8500 7690		3 2 2 1		

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	GHTERS RI NO.	CORDS NO.		TEST PCT.	FAT L8.	FRESH YEAK	KLCORDS NO.	L8.	TEST PCT.		305-DAY C RECORDS ND.		FAT	YEARLY HE RECORDS NO.		FAI
444308	18	45	7550	5.4	1 4 O 14	1949 1950 1951 1952 1953 1954 1955 1957 1958 1960	11 8 9 6 4 2 2 1	7781 7629 7354 7295 8285 8050 8300 8470 8830	5.7 5.4 5.3 5.0 5.1 5.2 5.1 5.0 4.4	441 410 389 368 423 415 422 422 391 494	1	7930 8900 9170 8700	435 452 447 429	1	9058	453
4451 b 3	40	74	6991	5.3	368	1948 1949 1950 1951 1952 1953 1954 1955 1956	5 18 9 8 4 6 10 7 4	7130 7056 6259 6876 5945 6843 7395 7130 6983 5680	5.5 5.5 5.5	356 375 435 360 328 354 404 395 381 311	3 2 1	7130 8060 7540 7050	378 434 398 356	1 2 1	6507 7679 7020 7521	408 399
447152	29	74	7 222	5.0	362	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 11 18 11 11 6 4 5 3	5847 7043 7324 7039 7675 6960 8503 7614 6507 5655	5.1 5.0 5.2 5.1 5.2 5.3 5.0 5.1	288 357 368 388 360 450 380 337 302	1 3 3 3 3 3 2 2	7260 9010 8710 7563 8757 8690 7745 6330	359 415 429 379 447 453 406 338	1 3 3 3 1 2	6878 8404 9654 8902 9211 7374	342 411 486 449 405 375
448498	1	2	7750	4.6	358	1958 1959	1	7500 8000	4.4	331 384						
446/37	31	100	7032	5.1	355	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 5 11 16 15 16 11 6 5 7	6477 5967 8162 7630 7453 7420 6779 7200 6282 6122 6539 9450 9200	5.2 5.3 4.5 5.1 5.1 5.1 5.1 5.1 5.1 5.0 5.1	338 319 367 391 374 380 344 369 322 310 324 429 420	1 6 11 11 16 11 6 5	8090 7752 6989 6557 6210 6509 7510 7430 8092 8220 8600	417 402 364 342 333 346 401 383 432 441 492	7 16 11 6 1 5	6834 7031 6810 7783 3128 7695 8785 8437	334 370 358 425 148 408 467 448
452341	46	133	7714	4.9	374	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 8 13 20 23 18 14 9 8 11	8610 7785 7068 8363 7905 8141 8368 8506 8523 7499 6753 5423	4.5 4.9 5.2 4.9 4.9 4.9 4.8 4.8 4.8	383 381 364 411 586 403 408 413 410 358 314 274	3 6 10 6 3 3 5	8807 8065 8180 8223 8977 9470 10048 7320	425 395 413 408 450 467 512 395	5 6 3 3 4	8561 7814 8989 9538 9126	413 386 458 477 459
453139	lţ.	6	6768	5.7	397	1956 1958	1 4	7140 6920	5.9 5.2	424 363	1 2	8620 7340	468 402	1 2	8993 8426	455 449
453500	1	2	7170	4.6	33∠	1959 1958	2	6890 7170	4.6	438 332	1	8900	458	1	8731	438
453691	13	34	8978	5.1	449	1950 1951 1952 1953 1954 1956 1957 1958 1959	1 4 6 10 7 1 2	7040 9663 8545 8465 8591 9990 12025 13860 12930	5.7 4.8 5.3 5.2 5.0 4.6 4.7 3.9	403 455 440 427 426 459 552 536 582	}	9160 9010	491 476	1	8219	4 49
454006	1	3	6880	5.1	352	1953 1954 1955	1 1 1	7490 6180 6970	5.3 5.0 5.1	395 307 355						
454147	4	11	8083	5•3	425	1952 1953 1954 1955 1956 1957	2 2 2 2 2 2	6695 7890 7895 8270 8780 8340	5.2 5.8 5.1 5.4 5.2 4.8	344 455 397 444 459 398	1	7920	404			
456846	1	2	7895	5.8	448	1955	1	9340	5.4	502	1	8680	458	1	ช426	401

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY WHEED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.		FRESH YEAK	KECOROS NO.	MILK L8.		FAT LB.	305-UAY C RECURUS NO.			YLARLY HE RECOROS NO.		FAT
						1956	JER:	SEY 6450	6 • I	394	1	8120	452	1	8415	456
45694	6 64	112	7 443	5.5	406	1956 1957 1958 1959 1960	2 11 34 48 17	7600 7935 7717 7541 7672	4.9 5.3 5.5 5.5 5.4	365 415 427 415 410	3 15 23 5	8120 8444 8242 8458	430 446 434 423	2 3 12 20 5	8246 6279 6647 8769 8947	396 333 466 463 460
45745	6 5	8	8375	5.2	438	1953 1954 1955 1956 1958 1959	1 1 1 1 3	10000 12010 9180 6100 8073 9270	5.2 5.5 5.4 5.2 5.5	520 659 500 513 444 460	 	7160 8140 8760 8990 7220 9320	357 401 431 494 390 469	1 1 1 1	8491 8317 9167 8993 8426	419 423 475 435 449
45815	9 1	1	7600	4.6	355	1956	1	7 660	4.6	355				1	8349	387
45987	6 50	108	6400	5.6	358	1951 1952 1953 1954 1955 1956 1957 1958 1959	14 19 29 25 12 8 4 5	5195 6603 6120 7085 6094 6411 6948 6113 5520	5.5 5.6 5.6 5.9 5.4 5.5 5.2	286 366 546 399 356 544 584 519	2 7 12 13 5 5	7815 7674 7464 7932 6302 6872 8200 8670	359 404 393 394 326 346 439 429	5 12 6 6	9708 7464 7483 7372 9047	
46044	0 2	8	8031	5.3	422	1951 1952 1953 1954 1955 1956	1 2 1 1 1	9480 8725 8760 8850 8590 7870 6310	5.3 5.2 5.3 5.3 5.3 5.0 5.6	502 462 455 473 457 391 353						
46067	6 1	1	9190	5.4	500	1960	1	9190	5.4	500	1	8820	482	1	8807	405
46172	7 11	26	7254	5.3	382	1950 1951 1952 1953 1954 1955	1 6 9 5 3 2	9010 7815 6890 7870 7253 8095	5.9 5.3 5.3 5.1 4.8 5.1	534 414 361 400 552 408						
46253.	5 4	8	7210	5.0	360	1955 1956 1957 1958	3 2 2 1	684 <i>f</i> 7670 6920 4000	5.2 4.8 4.3 4.6	353 363 276 182	2	8360	μμφ	2	8851 1804	482 306
46357	6 1	Ц	8203	5•2	425	1954 1955 1956 1958	1 1 1 1	8730 9110 6500 8470	5.2 5.5 5.0	451 471 354 425						
46358	0 2	14	7719	5.6	432	1951 1953 1954	1 1 2	3380 8350 8390	6.2 5.4 5.4	209 452 453	 	2300 8500 9270	121 404 425	1	1957	390
46503	0 1	1	8380	4.8	406	1956	1	8380	4.8	406				1	9058	438
46596	6 I	14	8898	5.6	500	1950 1951 1952 1953	 	9590 8170 8890 8940	5.6 5.6 5.6	540 457 501 502	1 1 1	8300 7710 7970 8760	492 451 451 523	1	6649	391
46675	0 17	50	/433	5.2	381	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1960	2 11 9 8 6 5 5 1 1 1	7305 7009 8087 7723 8482 7634 7430 6690 8380 8480 9900	5.2 5.1	431 362 406 398 411 380 383 361 458 501 576	1 2 3 4 3 4 5	8450 8035 8650 8413 9033 7970 7000	442 417 423 409 453 413 370	4 3	7554 7 76 წ	384 414
46721	2 15	22	5638	5+1	283	1954 1955	1	82 7 0 4900	4 - 1 5 - 0	337 246	1	9340	493	1	4363	479
						1956 1957 1958 1959 1960	5 5 4 1	6546 5190 6094 6035 1940	5.2 5.3 5.0 4.9 5.5	246 242 266 249 302 106	3 4 2 3	6883 6153 6300 7127	371 331 323 364	4 4 2 3	7543 4859 5396 6900	255 211
46844	0 123	216	7463	5.1	381	1949 1950 1951 1952 1953 1954 1955 1956 1957	12 25 27 46 59 52 25 12	8260 8057 8516 7497 7285 7574 7667 8286 8817 8395	5.0 5.4 5.2 5.1 5.1 5.1 5.1 5.1	400 426 437 384 374 380 390 420 448 441	5 11 20 34 21 13 4 5	8850 7800 7895 7634 7529 7706 7625 7953 7002 8115	478 425 434 412 401 409 417 433 386 467	18 21 12 4 5 2	7823 3046 7252 8658 7316 7925	479 368 473 385

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY OREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	305-DAY C RECOROS NO.			YEARLY HE RECORDS NO.	MILK	
						1959	JERS 5	BB06	4.B	420	1	6330	362	1	86B7	495
46893	7 5	10	6711	5.7	374	1957 1958 1959	4 5 1	6045 6560 6960	5.8 5.0 5.2	351 360 363	4 4 1	5580 6480 6960	303 336 373	14 14	6911 5744 7303	360 318 385
47 195	1 1	2	7145	5.3	375	1953 1955	} I	7250 7040	5.1	368 382						
47211	4 1	1	2690	5.4	140	1959	1	2690	5.4	146	1	5950	309	1	10366	513
472360	6 58	99	6190	5.5	341	1953 1954 1955 1956 1957 1958 1959	8 17 22 15 14 13 8 2	5706 6244 7202 5876 5874 6087 5330 6050	5.6 5.5 5.5 5.4 5.5 5.4 4.9	321 349 397 322 316 338 289 310	3 10 12 5 5 5	7880 8359 8294 8552 7658 7990 7690	394 429 430 440 404 433 424	1 8 12 9 8 3	7619 7854 8180 7317 5691 8633 8306	387 401 421 391 295 442 469
47280	0 2	2	7440	5.2	384	1951 1952	1	7730 7150	5.2 5.2	399 369	1	7040	316			
47292	4 16	24	7811	5.2	403	1953 1954 1955 1956 1957 1958 1959	3 5 7 3 2 2 2	8533 7400 7214 8803 8070 8005 6130	5.0 5.4 5.3 5.0 5.6 5.4 5.4	416 391 386 433 444 428 331	1 1 3 2 1 1	7550 7440 7670 8525 8160 8830 6880	403 404 411 456 438 484 360	2 1 3 2	8404 6344 7852 8246 8676 7652	410 327 431 450 482 413
47 32 1	5 1	2	10350	4.8	495	1958	2	10350	4.8	495	1	10080	509	1	9298	440
47400	7 260	582	7846	5.2	407	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 16 39 60 71 54 51 59 110 98	15790 8609 8076 7933 7748 7809 7785 7555 8254 8014 8659	5.3 5.0 5.1 5.2 5.3 5.2 5.3 5.3 5.2	845 429 415 410 409 410 408 391 425 419 445	1 5 12 25 36 29 32 24 52 47	11450 8038 7811 7530 7698 7613 7576 7403 8263 8068 7685	620 424 410 398 400 400 405 380 435 422 382	9 30 28 37 29 50 45	7566 7498 7797 7978 7777 3663 8854 8489	397 397 408 422 402 454 468 436
47400	В 1	2	11725	4.B	559	1959 1960	1	11710	4.5	526 592						
47608	6 50	श्रम	6737	5.3	351	1955 1956 1957 1958 1959 1960	1 11 25 19 13 10	6010 6989 6878 6843 7647 7165	5.8 5.3 5.2 5.4 5.2 5.2	350 367 352 369 390 367	10 13 8 10 5	6823 8287 7654 8224 7902	359 419 403 410 389	10 15 7 10 5	7488 6968 8458 8706 9132	403 381 441 445 462
47774	8 5	13	7327	5.1	371	1950 1951 1952 1953 1954 1955	1 4 3 3 1	8470 7215 8913 7630 7330 7110	4.9 5.1 5.3 4.9 4.9 5.0	411 367 465 377 356 355	1 3 3 3 1	8670 8753 6980 7920 7510 7030	466 458 38∠ 418 403 391	!	7608 7652	
47922	1 6	23	7056	5.4	380	1952 1953 1954 1955 1956 1957 1958 1959 1960	2 4 5 3 1 1 1	7395 7068 6602 6942 7373 9140 9330 9460	5.4 5.1	365 406 380 375 397 494 476 479 515	2 5 5 3 1 1 1	8415 8240 6958 7660 7570 8190 8020 8190 8750	450 426 380 407 402 430 435 438	5 5 3 1 1	7608 7652 7783 7695 8785 8437	
48118	5 16	46	7233	5.5	345	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 9 6 7 5 7 2	8010 7464 7495 8117 6552 7216 10405 6611 8030	5.3 5.5 5.5 5.3 5.7 5.5	431 397 411 452 364 393 583 364 400	2	7220 6860 7460	357 269 402	2	6399 8034	333 387
48167	9 55	43	6930	5.5	374	1952 1953 1954 1955 1956 1957 1958 1959 1960	1 11 13 16 14 19 9	7520 7466 7261 7287 7012 6313 7309 7222 7275	5.7 5.8 5.9 5.6 5.4 5.4	428 424 423 401 375 338 390 397 384	11 10 6 6 8 3 3	8040 8195 8675 8003 7304 7017 6960 5890	436 432 450 415 375 384 354 277	9 8 5 9 11 3 3	7663 8287 8884 7647 6239 6940 7343 7772	444 468 411 330 382 379
48249	I 9	18	6719	5.4	359	1951 1952 1953		7250 6436 7068		391 358 346	1	7340	390			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY JIRE

SIRE NO.	DAUGHTERS NO.	RELOROS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.	FAT LB.	305-DAY (RELORDS NO.	MILK		YEARLY HI RLCOROS NO.		FAT
						1954 1955 1956 1957 1958	JER: 2 1 1 1	6460 8280 7380 6390 6600		414 478 418 356 357	1	5420	274	à	5548	291
4827 O	7 \$	11	7071	5.3	413	1950 1951 1952 1953 1954 1955	2 3 2 2 1 1	9185 7143 8430 8005 10060 10090	5.9	487 371 461 479 602 627						
48286	1 147	232	7341	5.5	401	1955 1956 1957 1958 1959	10 19 38 68 71 26	7086 6342 7330 7537 7424 7255	5.9 5.6 5.4 5.5 5.5	418 354 397 413 407 385	14 10 15 22 36 12	6798 7014 7962 7609 7223 7792	378 368 406 390 366 396	4 13 16 19 30 11	6767 7024 7819 7663 8053 8370	353 392 416 399 420 424
48401	9 105	262	7569	5.3	398	1951 1952 1953 1954 1955 1956 1957 1958 1959	14 30 40 41 27 15 18 43 17 8	8399 8396 8495 7837 7799 8190 7592 6183 6113 8240	5.2 5.2 5.3 5.2 5.2 5.3 5.1 5.3 5.4 5.6	430 439 447 412 410 431 386 434 529 403	1 22 31 27 11 7 10 16 8	8134 8016 7710 7473 8197 7437 7846 8029 8265 8208	461 442 417 405 446 443 419 435 432 450	16 25 12 7 11 16 7	7927 8140 7785 8317 7922 8029 8378 8851	439 440 426 458 426 438 452 492
48471.	3 1	1	8380	5.1	د24	1953	1	8380	5.1	423	1	10270	572			
484840	36	72	7346	5.4	390	1950 1951 1952 1953 1955 1956 1957 1958 1959	1 1 1 1 16 20 16 10	10200 12860 7610 9100 7175 7688 7661 7586 7148 7270	4.6 4.5 5.3 4.5 5.3 5.3 5.4 5.3	471 573 401 408 385 405 410 411 582 344	1 2 7 12 7 7	9050 8755 8341 8258 7461 7579 6860	425 448 433 445 406 400 351	1 2 11 11 7 7	13898 8753 8720 7338 8432 8097 7140	530 470 468 386 462 425 372
48692	8 5	12	64/4	5.6	358	1952 1953 1954 1955 1956 1957 1958	3 2 1 1 1	6293 5980 6750 6900 8290 8775 8690 9920	5.7 5.5 5.5 6.3 5.8 5.2 5.1 5.3	354 330 371 436 483 458 440 521	2 2 1 1 1 2	7340 9010 6720 7800 7280 8270 3820 7300	403 443 377 407 395 432 442 394	1 1 1 1	7608 7652 7783 8230 8044	415 417 425 431 435
48816	2 1	1	2730	5.2	142	1958	1	2730	5.2	142						
48828	0 5	9	8834	5.0	440	1953 1954 1955 1957 1958 1959	1 2 2 1 1 2	10336 9580 8425 9280 8120 9425	4.8 5.2 5.6 4.9 5.3 4.8	495 495 464 456 428 445	1 1 2	9360 10860 8650 7645	377 459 463 400	1	8055 7946 9091	3/8 3/6
48839	2 1	3	6310	4.6	ز29	1957 1958 1960	1 1 1	4380 6620 7 930	4.7 4.6 4.6	208 307 365	1	5950 6780 5940	304 346 323	1 1 1	6911 5744 7107	318 317
48873	it ft	14	7768	5.5	42/	1953 1954 1955 1956 1957 1953	2 4 2 2 2 2	6680 10085 7750 9376 10405 10285	5.4	549 557 407 500 530 551						
48900	5 24	64	7439	J.4	400	1952 1953 1954 1955 1956 1957 1958 1959	6 10 13 12 6 7 6 5	8037 7465 7112 7613 7172 8427 8255 7260 7710	5.7 5.2 5.3 4.8 4.6	456 403 401 419 375 445 395 348 350	5 3 7 5 2 2 1 1	8823 7563 8433 8644 7535 8545 9310 8710 7870	477 404 453 468 370 414 507 458 413	1 7 5 2 3 1 1	9102 7979 8700 9725 8408 9189 9254 8611	
489891	0 41	107	6900	5.6	390	1951 1952 1953 1954 1955 1956 1957 1958 1959	25 25 17 10 6 4 4	7579 7214 7146 6733 8510 7616 7120 7178 8223	5.6 5.5 5.4 5.4 5.6 5.3	433 413 400 369 454 407 394 377 411	11 20 10 6 2 2	8178 7614 7834 7402 8685 8710 7325 8570 7080	412 423 401 434 458 408 485	10 9 5 4 2 1 3	7274 7488 7972 9017 6884 7848 8157	399 428 488 385 433

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY RRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

					KUS FR		STATE UNI		1V		ED CHEMINA	V C A · ·				
	DAUGHTER	AVERAGE	BY 51	KE		K	ECOKD AV	LKAGE	SY SIR	L LY	FRESHENING		A./	V. ADI V. Ü	60 A.C.	13.6
SIRE NO.	DAUGHTERS Nú.	RECOROS NO.		TLST PCT.	FAT L8.	FRESH YEAK	RECORUS NO.		TEST PCT.	FAT L8.	RECURDS			RECOROS NO.		
						1960	JĽR 2		5.0	365	2	5580	286	2	8786	487
490529	3	žį.	4525	5.3	231	1952 1954 1955	∠ 1 1	3740 5850 6340		211 257 287						
490967	1	1	3050	4.5	138	1958	1	3050	4.5	130						
491730	41	106	7382	5 . 4	396	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 9 20 20 14 9 12 8 2	6763 7668 7794 7836 8193 8299 7866 7124 5875 6940	5.4 5.5 5.6 5.4 5.4 5.0	370 421 423 427 453 465 425 389 290 338	5 10 10 5 2 3 3 2	5944 6828 8045 9764 10285 7907 8777 9060 8790	342 374 416 524 583 430 460 473 484	14 10 5 4 5 3 2	8985 7550 8315 9995 8609 8767 8230 8905	423 404 456 575 457 464 457 472
493850	1	1	3420	5.8	199	1959	1	3420	5.6	199						
490827		114	7945	5.1	404	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 15 25 19 14 13 12 9	8080 7694 7766 8654 9099 8952 8399 8617 9610	4.9 5.2 5.2 5.2 5.1 5.2 4.7 4.3	387 374 402 446 471 463 427 443 448 464	7 14 16 11 10 9 4 3	8501 8274 8801 8975 8815 9319 8605 6720 7540	429 418 443 454 450 438 455 370 403	6 15 11 10 9 4 2	8379 8343 8818 8889 9065 9050 8557 9832	411 417 445 453 464 466 456 5:4
496829	1	1	5420	5.5	299	1958	1	5420		299						
497599		100	11560	5.0	580	1759	1	11560		580		8160	428	1	10366	513
499130	70	102	8140	5.4	437	1957 1958 1954 1960	33 47 18	6873 7825 8556 7978	5.5 5.4	376 427 460 427	2 15 28 14	8850 8110 6178 7863	474 431 415 391	3 13 26 13	6347 8713 8357 8406	335 477 436 432
499207	8	12	6734	5.1	343	1958 1959	ت ب	7838 5463		399 286	2	68∠0 6∣⊍0	346 326	1	5744 7303	318 385
500929	34	58	7304	5.5	405	1957 1958 1959 1960	12 27 17 7	6386 7468 7785 8489	5.7	347 424 430 450	0 10 3 4	8235 8734 8609 8878	421 467 447 462	4 9 9 4	6799 8722 8747 9549	363 473 465 505
501764	ž ₄	7	8443	5.4	450	1953 1954 1955 1956	2 2 2 1	8990 6805 9420 7770	5.6	448 379 532 459	1 1 1	5800 8070 6760 7940	314 460 378 442	1 1 1	7619 8131 7608	397 439 414
502114	4	ц	6615	5.2	342	1959	4	6615	5.2	342	4	7150	373	4	9652	496
504455	3	5	6405	5.6	356	1954 1955 1958	2 2 1	7070 7335 4810	5.5	385 400 283	2 2 1	8420 9930	417 427 500	2 2 1	7592 8905 8033	372 448 417
505057	1	1	9640	5.0	483	1957	1	9640	5.0	483	1	7520	354	1	9592	450
506683	35	67	6871	5.3	35♀	1954 1955 1956 1957 1958 1959	2 6 14 27 12 4	9385 9475 6948 7583 6214 7086 6363	5.4 5.1 5.1 5.1	472 493 367 379 331 301 325	2 4 8 4	6510 6955 7248 7165		6 7 7 4	8350 8530 7730 8330	387 417
506697	2	2	7985	5.8	467	1957 1959	1	7400 8570		415 518	1	8800	48h	1	893a	479
506894	27	39	7113	5.3	372	1954 1955 1956 1957 1958 1959	2 11 13 6 4 3	7955 7941 6986 5667 7768 6907	5.2 5.5 5.4	418 412 360 314 420 388	5 5 4 2 1	7388 7228 7805 7565 8940	389 369 401 385 437	5 8 4 2 1	/244 /866 5840 8982 8066	389 407 322 451 458
500067	35	92	8450	5.2	431	1952 1953 1954 1955 1956 1957 1958 1959 1960	1 18 16 17 15 11 6 7	9570 8519 9053 8806 8301 7989 7748 8923 3100	5.1 5.2 5.3 5.3 5.4 5.4	364 438 470 459 438 418 412 400 153	10 8 3 5 3 4	8774 8423 8640 8730 8624 8323 6075 12330	448 423 447 440 437 430 324 648	7 8 6 5 3 2	8989 6416 8427 9113 8635 9265 8470	427 425 485 436 459 445
500078	3	3	71/0	5.3	364	1959 1960	2 1	8645 4220		412 268	1	6300	3.30	1	7107	37 ∤
508176	1	1	10190	4.9	490	1960	1	10190	4.9	490	1	10940	377			
510322	2	5	7267	5.1	371	1958	4	7 280	5.1	3/1	ż	7920	407	2	7/17	4/1

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING CREANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

411

DAUGHTER AVERAGE BY SIRE

51Rc NO.	DAUGHTERS NO.	KECUROS NO.		TEST PCT.	FAI LB.	FRESH YEAR	RLCORDS NO.		TLST PCT.	FAT LC.	SOS-DAY C RECORDS VO.			YEARLY HI RECORDS NO.		FAT
						1959	JERS I	8210	5 · 1	410	1	7730	409	1	d121	با ز با
51176	5 22	47	6290	3.5	345	1953 1954 1955 1956 1957 1958 1959 1960	10 6 12 4 7 3 1 2	6798 0121 6272 0723 6297 6423 7090 5666	5.6 5.8 5.0 5.0 5.1 4.9	3// 355 564 567 351 358 384 280	9 4 6 3 5 1	78/8 7220 7765 7777 7458 6770	411 375 401 419 400 373	7 4 6 3 5 1	7725 7652 7808 8153 7595 7423	413 407 415 442 412 412
51443	2 22	35	7474	5.4	403	1954 1955 1956 1957 1958 1959	6 3 3 10 4 2	7282 7152 6540 6952 8034 7193 7900	5.5 5.3 5.1 5.4 5.5 5.0	393 389 346 352 434 396 391	2 1 2 6 3 2	6545 7320 6730 6555 7533 8217 6255	365 401 333 323 377 413 320	2 2 2 3 4 2 2	7303 6873 7554 7085 6739 9701 7173	385 370 384 352 348 527 375
51408	4 1 04	146	7537	5.3	402	1957 1958 1959 1960	11 50 65 17	6307 7978 7836 7479	5.4 5.4 5.3 5.3	342 426 412 391	5 24 42 11	7652 7868 8047 7509	359 408 419 381	5 22 42 12	6268 8325 8814 8474	334 435 466 445
51498	1 95	151	8179	5.1	416	1953 1954 1955 1956 1957 1958 1959	1 8 12 10 16 52 34 18	11670 9329 8312 6668 7976 8796 8259 8461	4.5 5.2 5.1 5.1 5.1 5.1 5.1	528 481 423 343 398 444 425 432	2 4 5 4 22 16 10	8290 8298 7672 8513 8450 7915 8446	476 423 404 426 442 416 421	2 4 5 10 22 16	6589 6803 7179 6243 8686 8818 8752	353 453 377 412 454 466 445
51586	6 56	106	7493	5.1	38∠	1953 1954 1955 1956 1957 1958 1959	17 20 15 15 17 8 7	7540 7453 7165 7342 7246 7662 7736 8081	5.1 5.2 5.0 5.1 5.0 5.1 5.0 2.1	383 377 368 374 373 382 390 588	4 5 8 8 3 3 1	7565 7074 6688 7275 6043 7617 7960 7590	396 375 342 346 297 359 384 393	1 4 8 9 7 3 1	6507 6846 7062 7921 7303 8044 9407 9025	326 356 367 360 332 417 476 461
51597	3 1	1	7980	4.8	385	1956	1	7980	4.8	385				1	8622	416
51614	0 25	цq	7039	5.3	372	1953 1954 1955 1956 1957 1958 1959 1960	1 11 9 9 6 4	7330 7906 8196 7142 5489 5235 8568 9210	5.6 5.3 5.2 5.5 5.3 5.2 5.2 4.7	410 422 426 589 291 284 438 430	1 6 7 4 3 2 2	7290 8530 7523 9110 8203 8345 7420	389 450 394 475 414 455 393	5 7 3 4 1 3	8112 7856 8814 6723 8404 8186 7881	430 414 478 346 431 437 438
51708	0 1	3	6113	4.4	276	1957 1958 1959	1 1 1	7510 0020 2810	4 • 7 4 • 5 4 • 1	349 364 116						
51708	1 20	31	6609	5.4	353	1954 1956 1957 1958 1959 1960	3 2 3 7 13 3	6177 6910 6867 7111 6515 6437	5.6 5.6 5.2 5.2 5.5 5.5	344 388 359 373 351 356	2 1 2 3 4 2	7600 8430 8310 7650 8185 8675	413 438 436 392 405 456	2 1 2 2 4 1	6682 7499 8279 9151 7597 8099	354 415 446 479 400 458
51708	2 9	18	6350	5.5	348	1954 1955 1956 1957 1958 1959	2 1 1 2 4 3 5	8725 6520 6340 4500 7205 6380 5188	6.3 5.5	486 428 412 286 389 356 280	1 1 2	9260 6490 4830	332 255	1 1 2	2987 7663 8197	174 385 447
52005	1 1	1	5270	4.9	259	1958	1	5 2 7 0	4.9	259						
52201	4 7	11	6343	5.8	349	1955 1957 1958 1959 1960	1 2 2 4 2	6885 9455	5.5	378 375 453 378 255	1	8440 9450 3050	404 453 143	1 1 1	9799 9974 8382	481 476 469
52419	9 22	22	7895	4.6	367	1959 1960	16	8011 7595	4.6	370 358	9	8296 83 1 5	426 420	8	8657 8581	452 441
52431	5 8	16	6105	5.5	342	1958 1959 1960	7 7 2	6890 6183 3815		391 346 199] 4 2	6350 7740 6855	318 406 296	4 2	85 1 3 936 9	440 40d
52504	3 44	63	7078	5.1	363	1954 1955 1956	5 7 3	8518 9149 8937	4.9 4.9 4.8	415 446 425	5 5 3	8988 9500 8950	455 469 452	5 5 3	8814 9599 9894	476

TABLE 15.---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING GRGANIZATIONS---GROUPED BY BREED, BY YEAR OF FRESHEMING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRC RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAGGNIEK	AVCKAGE	01 311	V.C.			ECCKO AVE	KAGE	1 21K	C 01	LKE2HENING	TEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECORUS NO.		TEST PCI.		305-DAY (RECORUS NO.	CONFEMP MILK LB.	FAI	YEARLY HE KECOROS NO.	ERU AVE MILK LB.	FAI
						1957 1958 1959 1960	JERS 12 19 10 7	7265 7031 7205 5916	5.1 5.2 5.6 5.2	309 371 361 311	8 7 9 5	9114 7426 7483 6506	458 382 389 354	9 6 7 5	8433 8871 9083 8611	417 442 465 462
525040	5 58	81	8082	5.2	414	1954 1955 1956 1957 1958 1959	1 2 3 16 44 14	6820 4440 5575 6973 8248 8228 7864	5.6 5.1 5.6 5.3 5.1 5.5	379 225 308 375 417 430 386	1 2 3 7 20 9	7010 6720 7655 7687 7837 8227 8181	363 347 401 393 413 432 434	1 1 2 1 6 17 8	7630 7554 7586 7423 7953 8628 8636	408 403 376 392 423 456 462
52599	5 50	86	7016	5.1	360	1954 1955 1956 1957 1958 1959	3 6 8 16 23 20 10	7823 5998 8328 6954 8140 7453 6650	5.3 5.5 5.2 5.1 5.1 5.1	413 329 429 351 417 380 341	3 5 7 8 8	8143 7370 9333 7610 7568 7190 7207	454 ,386 480 390 390 373 348	3 6 7 6 8 3	7725 7597 9585 6395 8399 8764 7928	422 405 502 361 443 462 396
526669) 10	17	7249	4.9	357	1954 1955 1956 1957 1958 1959	1 3 4 4 2	4440 7260 6627 7305 7715 8080	4.8 5.1 5.0 4.8 5.1 5.5	215 374 335 354 390 445	1 3 2 1 1	7550 8210 7525 8380 8890 7400	396 422 396 433 442 397	1 3 2 2 1	7630 8404 7636 6524 8230 8273	408 433 406 278 431 433
52667	1 33	54	6334	5.4	343	1954 1955 1956 1957 1958 1959	1 3 5 5 18 15 7	8020 6927 5554 5690 7764 6356 5780	5.0 5.3 5.7 5.3 5.3 5.5 5.4	404 361 317 306 416 351 321	2 2 2 6 8 3	6890 7170 5050 7345 8108 5710	363 388 274 395 423 305	2 2 3 6 7 3	6851 6491 6060 7816 8107 8241	370 379 298 426 443 443
52091	149	228	8229	5.3	435	1956 1957 1958 1959 1960	11 29 69 78 41	8142 7970 8541 8566 8038	5.2 5.4 5.4 5.3 5.3	420 433 457 451 429	6 17 27 45 28	8365 8578 8676 8350 8229	443 454 423 420 420	9 13 27 42 29	8546 7720 8800 8600 8690	443 436 468 450 450
52803	1 16	27	7313	5.4	394	1954 1955 1956 1957 1958 1959 1960	1 5 4 5 3	10130 7690 6442 7418 7655 6820 7730	5.0 5.5 5.2 5.5 5.3 5.4 5.4	503 418 334 401 403 370 423	1 2 2 2 2 2	6860 7080 8440 9075 8255 6980	379 370 409 471 390 366	1 2 3 2 2 2	6943 6731 7543 10312 9107 8470	367 350 402 533 443 459
52827	7 1	1	5950	5.6	332	1959	1	5950	5.6	32د	1	7240	391	1	7510	407
528829) 14	26	6415	5.3	330	1953 1954 1955 1956 1957 1958 1959	1 4 5 5 4 4 3	5530 6735 6924 6400 6953 7263 6727	5.4 5.2 5.5 5.3 5.3 5.1 4.9	297 340 377 334 377 572 329	1 2 3 3 1 1	6240 7895 7290 7140 8200 7690 6560	327 391 389 386 418 417 317	1 3 3 2 1	6322 7546 7517 5172 8371	324 397 395 266 459
52935	5 1	2	8280	6.5	538	1959 1960	1	8950 761 0	6.7 6.3	597 479						
53270	ک +	3	7470	5.0	378	1960	3	7470	5.0	378	2	10230	510	1	9014	471
53436	5 15	26	7433	5.1	378	1954 1955 1956 1957 1958 1959 1960	1 1 4 8 8	6803	4.7 4.0 4.7 5.2		2 2 3	10460 8695 7340 7850	520 445 421 390	1 3 1 3	8469 7583 7848 8117	433
53475	3 67	111	7903	5.2	407	1955 1956 1957 1958 1959 1960	4 10 18 37 30 12	7355 8423 7747 8267 7638 8688	5.2 5.1 5.2 5.1 5.1	391 424 390 429 391 446		7700 7896 8674 8501 3241 8483	401 406 437 433 420 413	2 10 11 23 14 9	7342 8680 8483 9118 8673 9150	438 464 451
53560	7 2	2	8055	4.4	354	1959 1960	1	8060 8050	14 = 14 14 = 14	352 356						
53827	9 48	80	6733	5.3	356	1956 1957 1958 1959 1960	5 14 31 22 8	7586 7044 7104 6704 5609	5.0 5.3 5.4 5.3 5.1	378 372 381 362 282	5 14	8275 7652 7217 7063 6590	411 375 383 375 345	4 9 13 8	8107 6081 8076 7801 9102	355
53871	5 1	2	5 le5	4.4	228	1957 1958	1	5320 5050	4 - 7 4 - 1	248 207				1	5799	270
54143	6 1	1	7160	4.2	301	195₹	1	7160	4.2	301	1	5800	295	1	6071	306
54161	B 40	59	6179	5.5	343	1957 1958 1959	9 31 11	6149 6717 5967		33∠ 380 3∠7		7720 7472 7260	381 368	4 15 4	6802 8907 8715	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

413

DAUGHTER AVERAGE BY SIRE

							LUUND AVE		311		T NE STIENTING	LAK				
SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8.	SOS-DAY (RECORDS NO.			YEARLY HI RECORDS NO.		
						1960	JERS 8	6859	5.5	381	7	6919	354	6	9534	494
54404;	2 73	121	7047	5.2	365	1955	i,	7550	5.2	397	1	6650	326	1	7140	360
						1956 1957	13 29	7267 7012	5.4	391 360	4 15	73/8	361	12	8200 7403	437
						1958	38	7360	5.2	386	16	7497 7682	383 412	16 14	8349	14 14 14
						1959 1960	27 10	6958 7388	5.0	354 370	6	7606 8123	393 409	10 6	8648 8190	452 418
54664	8 7	10	6146	5.1	310	1958	2	7415	5.3	383						
						1959 1960	14 14	6703 5538	5.1 5.1	338 284	1	7120	353	1	7619	375
54//3	1 43	60	6318	5.5	347	1957	1	6990	5.8	404	.1	0008	464	1	7379	423
						1958 1959	26 20	6805 6394	5.5	375 353	10 16	8028 7603	416 402	8 14	8136 8037	447 438
						1960	13	5615	5.4	304	9	6497	343	9	8699	455
54877		1	9310	5.2	486	1957	1	9310	5.2	486	1	7820	417			
54944	9 30	46	7015	5.4	380	1957 1958	1 26	7300 735 ช	5.6	406	9	8272	418	8	8187	423
						1959 1960	11	7312	5.4	393	7 5	7476	425 495	7	8711	489
550196	6 1	1	2180	5.2	114	1959	1	6574 2180	5.5	368 114	1	3680	238	5	8454 8731	477 438
55072		2	8560	5.2	445	1958	2	8560	5.2	445	•	3000	230		0731	430
55072.	3 4	5	7480	5.1	381	1959 1960	1	6883 8460	5.2 5.0	357 420	1	6300 9220	333 472	1	7761	407
55z35	2 1	1	6710	4.9	331	1959	1	6710	4.9	331						
55350	7 9	12	7280	5.0	360	1958 1959	1 7	9460 7683	4.7 5.1	445 387	3	7047	361	3	7314	376
						1960	4	5525	5.0	273	i	6900	302	1	7314	371
55429	1 14	21	8029	5.1	409	1958	3	8318	4.9	401	ц	8378	417	3	8291	418
						1959 1960	9	7618 8595	5.2	395 441	4 3	8193 8567	437 461	4 3	8374 8767	440 459
554842	2 22	35	7614	5.2	396	1957	1	8370	4.4	365	•					
33404.		33	1014	3.2	370	1958	15	7530	5.3	403	10	7649	408	10	8299	448
						1959 1960	11 8	8420 7204	5.2	437 368	8	8170 7593	431 393	7 4	8007 8625	439 457
55631	1 34	56	7796	5.6	438	195ช	14	9027	5.5	490	6	7777	410	6	8520	444
						1959 1960	30 12	7328 8331	5.6	415 478	21	8185 7038	422 368	20 8	9589 9095	499 485
e e anno		_	3									10.30	300	6	7073	403
55726	7 6	7	7226	5.2	374	1958 1959	1 3	7410 5627	5.2 5.2	384 288						
						1960	3	8020	5.2	420	1	8560	435			
55726	8 14	22	5441	5.2	280	1957 1958	3 6	5443 5998	5.4 5.4	285 323	1	8760 8860	437 459	1	3608 9341	217
						1959	8	5533	5.1	281	2	6685	335	2	7870	413
56080	6 2	2	2345	4.6	109	1960	5	5808 2345	4.9	287	1	7770	399 161	1	8012	424
							2		4.6		'	4010	101		0431	447
56148		2	6975	5.3	366	1959	2	6975	5.3	366						
563651		1	8520	5.4	463	1960	1	8520	5.4	403	1	8010	421	1	9036	485
56473	1 9	12	7232	5.1	365	1958 1959	ц 3	7825 6933	5.3	411 356	1 3	6870 7 547	386 411	1 3	7467 8287	433 445
						1960	5	7384	5.0	366	3	8053	443	3	8368	475
56706	4 19	20	6337	5.4	340	1959 1960	8 12	6400	5.2	348	6	7027 6416	389	6	7981 8757	436 471
57163			7.1.7.	1.6	701		12	6284	5.0	347	ŕ		338			
57191	1 11	11	7835	5.0	394	1959 1960	1	8920 7216	5.0 5.1	448 363	1 5	7810 7914	426	1 4	8175 9061	460 481

TABLE 15.--DAUGHTER-AVERAGE OF SIRLS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECURDS NO.			FAT L8.	FRESH YEAR	RECORUS NO.		TEST PC1.		SDS-DAY RECORDS		FAT	YEARLY HE RECORDS NO.		FAT
							BROM.	SmISS								
3553	5 1	1	9140	3.7	335	1957	ı	9140	3 - 7	335						
30049	9 1	3	10537	3.8	394	1953 1954 1956	1 1 1	9010 12790 9610	4.0 3.8 3.6	357 405 354						
4867	1 1	2	7810	4.1	320	1948 1950	1	8350 7270	4 • 1 4 • 1	344 296						
4867	2 1	2	8560	4.4	37 2	1952 1955	1	7490 9630	4.6	342 402	1	10640	436 343	1	9134	377
50092	2 1	1	8120	3.7	303	1953	1	8120	3.7	36.5						
5958	5 39	73	11379	4.2	47 3	1954 1955 1956 1957 1953 1959 1960	1 11 11 11 25 10 4	12210 11045 11130 10703 11648 11862 12128	4.1 4.3 4.3 4.2 4.2 4.2 4.4	506 471 477 444 466 493 535	7 3 9 10 5 3	8839 10097 10547 11251 10164 11353	384 427 430 470 422 479	7 3 8 9 5 3	9986 9236 9875 9808 11099 11358	418 390 430 408 462 479
5969	9 1	2	8360	4.0	330	1958 1959	1	8370 8350	4.0 3.9	332 32 7						
5981	1 3	6	7414	4.4	325	1954 1955 1956	2 2 2	9340 7268 8210	4.5 4.6 4.3	399 333 357	2 2 2	9205 9435 10905	402 370 422	2 1 2	9810 11521 10856	426 499 451
6257.	5 l	3	11803	4.3	505	1957 1958 1959	1	10290 10760 14360	4.3 4.2	444 401 610						
6450!	5 46	49	11099	4.2	465	1953 1954 1955 1956 1957 1950 1959 1960	2 13 14 14 12 27 15	10390 11748 11050 10823 11657 11060 11616 9125	4.2 4.1 4.2	428 494 478 458 461 465 467 362	1 2 9 5 4 11 7 2	11890 9972 8761 8090 8980 11161 10777 8250	510 406 370 317 362 475 460 316	5 10 6 5 9 7 2	9856 9761 9253 8668 9901 11208 9146	412 409 385 353 420 470 357
6483	7 14	28	10469	4.0	421	1955 1956 1957 1958 1959	1 2 2 11 10 2	9610 9125 11265 11810 10520 7730	3.9 4.1 3.8 4.2 3.9 4.2	3/3 3/2 429 492 413 318	1 2 2 4 8 1	11120 9630 8650 11460 11556 12640	465 411 375 485 475 543	1 2 2 4 8	10410 10202 9908 10892 11467 12055	441 431 407 464 474 492
6035	4 5	7	8995	4.3	383	1956 1957 1958 1959	1 2 2 2	11190 9665 10170 8060		513 402 421 343	1	10970 10510	473 444	i i	10944 7815	438 319
6835	5 2	5	8736	4.1	364	1954 1955 1956	2 1	3340 8390 12600	4 • 2 4 • 2 4 • 1	549 360 517	1	7000	259			
6891	3 28	41	10723	4 - 1	436	1955 1956 1957 1958 1959 1960	3 7 6 15 11 5	9063 0416 11232 11941 12161 11165	4.2 4.1 4.1 4.1 3.9	371 347 463 489 470 459	1 2 2 6	11710 10510 11250 11126 10453 7130	480 435 466 465 441 293	1 3 1 4 6	11587 9389 10311 10647 10671 9875	497 410 566 443 449 399
6897	7 1	1	17250	3.8	651	1955	1	17250	3.8	651						
6904	8 2	5	10011	4.7	468	1953 1954 1955	1 5 1	8940 10053 11640	5.0 4.7 3.9	451 4 7 0 458						
6997	8 6	12.	9276	4.6	421	1956 1957 1958 1959	1 2 6 3	9540 8035 8915 8533	4.4 4.0 4.9 4.4	415 570 441 359	1 2 3 4	11730 10565 11067 7350	471 438 468 312	1 2 3 2	8982 8153 9930 11380	377 352 424 434
7001	2 1	1	12690	5.9	501	1959	1	12696	3.9	10c						
7041	0 70	132	10841	4.3	465	1954 1955 1956 1957 1958 1959	1 0 19 25 47 27 7	7910 11527 9623 10868 11649 11256 11049	4.4 4.3 4.1	523 500 412 450 510 468 468	1 3 9 15 23 11	10390 10323 10628 10741 11276 11502 9483	440 444 439 430 481 467 401	1 2 13 16 15 11	10431 10203 10391 9755 9956 10406 9480	441 432 438 424 405 441 403
7100	9 34	58	9437	4.4	410	1954 1955 1956	ს ც	9855 9761 9777		445 419 405	1	10310 11760	589 474	1 2	11009 12775	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

											305=UAY	CONTLAND	. AV	YLAKLY H	PRO AVE	KAGI
SIRE NO.	DAUGHTERS NO.	RELOROS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	RECURUS NO.			RECORUS	MILK	
						1957 1958 1959 1960	7 16 10 01	SWISS 8530 9354 9036 10404	4 . 4 4 4 4 4	373 416 392 456	5 / 4 4	10910 10711 9110 10990	438 451 372 456	3 4 3 4	10551 9701 10730 10827	432 401 439 459
7192	0 1	1	8370	4.6	383	1957	1	8370	4.6	388						
7234	4 1	2	6640	4.2	281	1958	2	6690	4 . ∠	281	1	9160	369	1	8328	343
7406	2 1	2	12300	4.0	490	1958 1959	1	12730 11870	4.2 3.8	529 450						
7605	9 5	11	8438	4.5	371	1954 1955 1956 1957 1958 1959 1960	1 2 1 1 4	4700 6380 8960 8180 12220 9880 6520	4.5 4.3 4.4	236 286 384 363 484 430 280))	11260 8700	478 358 438	2	8796 9134 11380 9418	3/8 377 484 402
7620	2 2	6	10710	4.3	463	1955 1956 1957 1958	2 1 2 1	10790 11280 10370 10660		465 507 447 440						
7731	9 1	1	11050	4.6	511	1957	1	11050	4.6	511	1	10330	449	1	11194	459
7777	5 1	2	11750	3.9	454	1958 1959	1	12030 11470	4.0 3.7	479 428						
7815	2 3	4	10437	4.2	442	1958 1959	3 1	10490 9470	4.1 4.2	440 397	1	10580 8580	449 374	1	7815 11380	319 484
7892	8 1	1	4970	4.6	231	1955	1	4970	4.6	231						
8240	5 25	39	9103	4.2	389	1954 1955 1956 1957 1958 1959 1960	1 3 6 11 12 5	9420 8780 7267 8732 9029 8295	4.4 4.0 4.2 4.3 4.2 4.2 4.4	412 353 308 373 387 352 469	1 2 6 7 9 3	10140 10215 9488 10693 10817 11063	426 424 3d9 429 433 460	1 2 4 7 9 3	9074 9851 9795 10640 11510	441 371 378 404 434 470
8251	7 30	56	9584	4.4	421	1953 1954 1955 1956 1957 1958 1959 1960	3 11 8 7 15 2 5	8720 9602 9028 8867 8489 11123 10435	4.4 4.5 4.3 4.4	371 417 403 377 376 500 459 464	1 3 4 3 5 1	9020 10023 10003 10377 8970 11458 9730 8000	383 423 413 448 390 460 413 328	1 3 4 3 4 5 1 3	9603 9897 10178 9112 9614 9985 8807 9745	401 408 418 306 403 417 309 387
8613	7 58	122	9542	4.3	413	1953 1954 1955 1956 1957 1958 1959	9 16 12 14 15 27 18 11	9448 10398 9214 8472 9097 9681 9726 10844	4.5 4.4 4.5	407 468 406 377 402 423 410 451	4 9 8 7 9 13	10643 9511 9943 9906 9673 11315 9931 12130	451 373 418 408 404 476 415 511	9 8 6 9 10 9	9770 9783 9476 9471 10145 10946	408 408 400 403 430 462 463
8013	9 3	9	12336	4.2	519	1955 1956 1957 1958 1959	1 2 3 2 1	10930 10435 13033 11755 12280	4.1 4.2	461 433 542 492 559	1 2 2 2 1	9250 12390 11995 8560 6960	400 483 444 365 282	1 1 2 2 1	9734 9265 13927 11167 10519	414 393 457 468 446
8625	9 48	78	9581	4.2	405	1953 1954 1955 1956 1957 1958 1959	1 10 6 8 12 16 13	7960 7949 9807 9325 9382 10006 9488 10337	4.5 4.4 4.4 4.2 4.1 4.3	399 439 427 402 387 407 408 427	3 4 5 3 3	10127 7045 11030 11266 11a13 10740 8258	410 393 440 439 479 445 335	3 4 6 5 3 3 5	10432 10314 11247 8670 10682 10573	4/8 4d0 347 4/4 445
8767	7 1	2	8705	4.3	375	1954 1956	1	9660 7750		415 335						
9009	2 3	4	10350	3.8	395	1955 1957	3 1	10543 8090		403 315	2	10095	428	2	9500	397
9123	4 13	23	10340	4.2	424	1954 1956 1957 1958 1959	1 2 3 8 6 3	12380 11960 10230 11516 10503 9830	4.1 4.3 4.0 4.2	495 469 435 456 427 428	2	10450 12645		2 2	9576 11750	400 408
9185	6 1	2	8405	4 • 2	351	1958 1960	1	8540 8390		345 357						
9209	9 1	2	5720	3.3	190	1959	2	5720	5.3	190						
9377	1 1	1	16120	3.8	615	1960	1	16120	٥.٥	615	1	11680	454	1	13178	533

TABLE 15.---DAUGHTER-AVERAGE OF SIRES IN SCRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--SKOUPED BY BREED,
BY YEAR OF FRESHENING--KECORUS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE ND.	OAUGHTERS NO.	KECOKOS NO.		TLST PCT.		FRESH YEAR	RECORUS NO.		TEST PCT.				FAT	YEARLY HE RECORDS NO.		FAT
							380m4	SWISS								
94392	2 2	3	14045	4.0	560	1955 1956 1959	1 1	14070 12730 14690	4.3 3.5 4.1	606 442 596	1	11600	456	1	12099	491
94391	3	5	8168	4.4	365	1958 1959	1 14	7010 7750	4.8	338 327	1 3	10350 10303	434 443	1 3	8295 8807	307 307
94606	9	11	9393	4.3	404	1954 1955 1957 1958 1959	1 3 1 3 3	8480 10227 11860 10495 7903		350 433 537 474 335	2 1 2 2	11400 12070 12285 10580	485 505 514 424	2 1 2 2	9854 12273 12437 10715	502 520
9406) 1	2	9285	4.2	390	1955	2	9285	4.2	396						
9477	3 5	7	11145	4.1	450	1954 1955 1957 1958 1959	1 1 1 2 2	15120 15090 4830 16070 9860	4.0 4.2 4.4 3.9 4.1	609 633 210 628 396	1	8750	357	1	9625	391
96331) 1	2	8290	4.5	373	1957 1958	1	9640 6940	4.c	441 304						
90809	42	71	9276	4.2	388	1954 1955 1956 1957 1958 1959 1960	1 / 9 13 27 9 5	8800 8644 7187 8205 10527 10027 8568	4.5 4.2 4.4 4.3 4.1 4.1	392 364 320 353 430 413 381	3 2 8 8 2 1	9357 9465 11663 10891 9745 10800	390 391 461 440 422 483	2 5 8 7 2	9990 8356 9396 10182 10055 9211	364 476 415
98600	5	9	6537	4.1	270	1950 1957 1958 1959	1 2 5 1	4710 6740 7706 12210	4.3 4.2 4.1 4.1	202 285 315 497	1 3 1	9860 8510 9380	403 360 402	1	3172 9080	1∠9 368
994 38	3 5	9	8990	4.3	387	1957 1958 1959 1960	2 3 3 1	8645 9923 8223 12090	4.3 4.3 4.4 4.0	371 434 562 483	1 1 1 1	10430 13440 11260 9850	420 510 458 408	1 1 1 1	8469 11380 10617 10453	467
10051	3 3	6	10241	4.4	454	1955 1957 1958 1959	1 1 3 1	12300 12190 12547 5806	5.0 4.1 4.4 4.3	621 501 549 252	1 1 2	12640 11270 11325	557 440 469	1 1 2	10268 10333 10857	443 407 451
10054	1	2	9220	4 - 1	379	1956 1957	1	9220 9220	4.1	381 376						
10131	5 1	1	10790	3.7	403	1957	1	10790	3.7	403						
10187) 1	2	12470	4.2	516	1959 1960	1	13390 11550	4.1 4.3	543 493						
10295	+ 1	1	8310	4.0	329	1960	1	8310	4.0	329	1	7040	302	1	8088	318
10340	3 1	1	8790	4.1	360	1960	1	8790	4.1	360						
10648	2 3	6	13172	4.2	559	1955 1956 195 <i>7</i>	1 3 2	13180 12603 13920	4.2 4.1 4.3	555 528 602	1 3 2	11170 10740 10815	467 447 456	1 5 2	9854 10202 990°	416 431 467
10791	5 I	1	15300	4.3	658	1959	1	15300	4.3	658						
11359	2	4	9027	4.4	392	1957 1958 1959	1 1 2	9280	4.2 4.2 4.5	390	1 2	10850 11795	468 467	1 2	10944	438 491
11421	2 8	8	11496	4 - 3	497	1959 1960	4	10713		455 539	2 3	11790	486 580	2 3	11925	504 573
11495	9 9	9	10673	4.1	434	1959 1960	2 7	6805	4.1	273 487	1 7	15020	626 472	1 7	12099	519
11588	1 61	90	9753	4.1	404	1956 1957 1958 1959 1960	2 6 32 35 15	8075 9022 10484 10202 8236	4.0 4.2 4.2	318 384 439 420 341	1 3 7 18	10320 11880 11218 10544 10630	411 498 482 437 441	1 1 9 15 7	1151° 10671 9976 10834 10416	510 440 418 456 444
11605	5 2	2	6290	4.0	255	1959 1960	1	8480 4100	4.2 3.7	358 151	1	77 10 84 70	307 360	1	5875 7750	230 307
11712	5 3	3	10400	4-4	449	1958 1959	1 2	9570 10815	4.1	391 478	1	11090	447	1	11750	488
11933	0 1	1	11010	4.0	441	1959	1	11010	4.0	441						

PENNSYL VANIA 41/

.

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EXLED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTER	AVERAGE	BY 51	RE		ĸ	ECORO AVE	KAGE	NIZ YS	E BY	FRESHENING	YcAR				
SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAI LB.	FRESH YEAR	RECORDS NO.			FAT Lb.	305-BAY (RECORDS NO.	ONTLMP MILK Lo.	FAT	YEARLY HE RECORDS NO.	MILK	RAGE FAT LJ.
120033	. 1	1	7660	4.1	318	1960	1		4.1	3.1H	1	6330	255	1	8083	318
1202∠6		2		4.3		1960	2	12300			1	11950		1	12219	
120448	1	2	12235	4.6	554	1959 1960	1	12740 11730	4.6 4.5							
121440	2	2	5280	4 - 4	229	1960	2	5280	4.4	229	1	6700	270	2	8088	318

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECURDS NO.	MILK LB.	TEST PCT.	FAT LB.	FRESH YEAR	KLCUROS NU.			FAT L8.	305-DAY (RECURDS NO.	MILK CONTEMP		YEARLY HE RECURDS NO.	RU AVE MILK LB.	FAT
							M. SH01	KTHORN								
17915	. 4	5	8213	3.7	305	1958 1960	2 3	7390 8457	3.6 3.7	262 314	2	6010 4760	217 168	1	5308	146
277 12	6	10	7717	3.8	296	1957 1958 1959	1 5 1	6150 8724 I1550	4.0 3.5 4.3	245 336 500	I	6640	237	1	6017	240
						1960	3	8153	4.0	336	1	2620	111	1	5308	196
45443	4	łĻ	7263	3.8	268	1957 1958 1960	1 2 1	9010 7335 5370	3.4 3.7 4.2	304 270 227	1	6560	234			
92492	1	1	4520	5.6	162	1960	1	4520	3.6	162	1	5130	179	1	5308	196
121506	2	3	7660	4.4	333	1958 1959	2	7780 7440		345 355						
140732	1	2	8715	3.3	289	1958 1960	1	8450 8980		286 292	1	6080 4730	221 1/2	1	5308	196
170ა51	1	1	5030	4.0	199	1959	1	5030	4.0	199	1	5720	195	1	6246	222
190439	I	1	9110	3.9	355	1960	1	9110	3.9	355	1	10480	395	1	9178	353
2680184	1	2	4820	4.2	193	1957 1958	1	1420 8220		62 323	1	10410	397 251	1	1428 9221	63 378

OH10 415

DAUGHTER AVERAGE BY SIRE

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING URGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

RECORD AVERAGE BY SIRE BY FRESHENING YEAR

1954

4.3

4.4

9067 5.9

4.6

4.9

4.7

4.3

3.8

3.9

4.2

4.0

4.6

4 . 4

4.3

35.7

OH10

TABLE 15.--GAUGHTER-AVERAGE OF SIRCS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLD BY ERCED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

421

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECURDS		TLST PCT.		305-0AY I RECURUS NO.		FAT	YLARLY HE RCCORDS NO.		FAT
						1957	AYRSI	9590	4.1	39 3	1	9410	360			
74911	72	161	10142	4.0	40/	1953 1954 1955 1956 1957 1958 1959	2 11 33 38 39 19 15	10800 11018 10564 10336 10176 10030 9866 11140	4.0 4.0 4.0 4.2 3.7	448 441 434 413 408 421 385 412	5 22 23 24 11 15	9678 9308 9908 9536 9966 10121	391 383 398 397	3 17 14 21 10 12 2	10101 9575 9697 9959 9492 10301 10802	383 370 395 375 409
/6613	2	5	5862	4.1	234	1954 1955 1956 1957 1959	1 1 1 1	7920 7210 7740 4650 3550		290 323 289 190 143						
76927	1	1	8510	4.5	380	1949	1	8510	4.5	380						
713∠8	46	78	10223	4.1	418	1955 1956 1957 1958 1959 1960	21 18 18 11 6	14195 10277 10457 9960 9235 10537	4.0 4.2 4.1	581 413 443 410 372 414	12 11	10900 9512 9795 10943 10066 10760	383 444	2 8 8 6 2	9810 9807 9920 9670 10332 10334	407 373 367 368 409 372
78287	53	103	9257	4.2	391	1953 1954 1955 1956 1957 1958 1959	0 18 19 24 13 14	9875 8961 9543 9215 9618 9366 9660	4.3 4.2 4.1	412 387 412 385 397 387 393	6 8 14 83 6 9	10230 10463 10426 10088 8747 10513 9752	451 423 397 347	4 8 12 11 7 6 6	10540 10716 9728 9587 9205 9561 9859	415 427 371 375 350 313 393
78927	1	5	8850	4.6	402	1954 1955 1956 1957 1958	 	9370 6150 10510 7850 10370	5.2 4.4 4.5	441 321 461 350 438	1	7670 6760 7700 12040	291 337 335 492	1 1 1	7674 9014 9167 9309	346 386 407 407
79013	7	16	9425	4.2	389	1954 1955	5 2	10378		427 388	2	11150	432	1	8066	322
						1956 1957	5 2	8587 10535	4.1 4.4	356 459	2	8070 9020	368	2 1	9657 8775	309 373
						1958 1959 1960	1 2 1	11020 10890 10450	4.3	467 466 422	 	9740 8800	395 364	2	9483	395
79374	. 1	1	10380	4.1	423	1959	i	10380		423	i		362			
81464	ì	7	8 199	†* †	355	1952 1953 1954 1955 1956 1957	1 1 1 1 1 1	8870 6560 7080 6790 6730 10250	4.6 4.6 4.1 4.2	425 276 327 309 2/3 426 446						
81598	5	8	10405	3.9	407	1954 1955 1956 1957	3 2 2 1	10203 9935 12650 10100	3.€ 4.1	387 372 513 439	5 2 2	9887 9000 10250	395 309 401	5 1 1	9839 10551 11467	437
81791	6	12	8703	4 • 2	363	1952 1953 1954 1955 1956 1957	1 5 1 1 1	9550 8096 11960 13250 14050 13180	4.1 3.7 4.5 3.7	414 537 464 590 518 539] 	10520 10570 11110 10750 11120	443 459 451	1	9679	3ei0
						1958 1959	1	11330 12880	3.8	426		11010 11000	430		10257 10780	
83105	1	2	8415	4.1	340	1957 1958	1	8020 8810	4.3 3.6	345 334	1	9360 9460	366 369	1	8916 8938	374 350
84424	20	21	9570	4.0	379	1956 1957 1958 1959 1960	5 9 4 4	8690 10915	4.0 4.0	366 341 405	2 4 2 4	9640 9495 8555 10408 11620	384 341 403		11189 10846 10807	457
84598	71	133	9843	4.1	403	1955 1956 1957 1958 1959 1960	27 34 31 23 17	9462	4.2 4.0 3.9	417 396 376 386	13 13 11 9 17	9665 9008 9987 9611 9664 9140	357 386 378 384	7	8764 9528 10227 9173 10056	352 394 358
86779	5	7	8861	3.9	347	1955 1956 1957 1958 1959	1 2 1 2	8680 11450 7190	3.9 4.2 3.9 3.9	363 446 276	2	10600			11107 13690	
87190	26	36	9322	3.9	359	1955 1956	2	7525	4.1 3.8	303	2 4	9960 9415	410	1	10551 10355	459

HIO

TABLE 15.---DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

SIRE	DAUGHTERS	RECOROS	MILK	LESI	FAT	ERESH	RECORUS	MILK	TEST	FAT	305-0AY (R∈CORDS			YEARLY HE	RO AVE	
NO.	NO .	NO.		PCT.	LB.	YEAR	NO.		PCT.	Lb.	NO.	CE.	LB.	NO.	L8.	rs.
							AYRSI	HIRE								
						1957	13	9508	4.0	377	Łį.	9153	360	3	9545	400
						1958	7	9453	4.1	375	5	11247	466	1	3535	362
						1959	3	9770	3.0	366	2	8645	3 3 3	1	7063	281
						1960	1	7600	3.8	290	1	9300	361	1	9221	353
87504	1	3	102 o /	5.7	375	1951	1	10850	3.6	392	1	9940	373			
						1952	1	10940	3.5	384	1	9580	380			
						1953	1	8980	3.9	348	ı	9390	390	1	10213	379
880 98	39	56	9681	4.2	410	1956	11	9735	4.5	416	6	9663	378	3	10064	391
						1957	19	9712	4.3	422	7	10701	430	5	9795	400
						1958 1959	14 7	9294 10323	4.3 4.1	402 427	6	10978	431 394	4	9429	370
						1959	5	8452	3.9	330	7 5	9936	371	6	10139	403 428
903∠3	1	2	10045	3.6	360	1957	1	11050	3.6	402	1	10350	382	!	10758	403
						1958	1	9040	3.5	318	1	10170	397	1	10453	410
90392	10	19	8772	4 - 1	356	1954	1	10590	4.7	500c	1	13620	596			
						1955	4	8188	4.4	350	3	9673	415	1	10050	409
						1956	5	7764	4 - 1	306	14	9143	359	2	8753	356
						1957 1958	1 3	6340	4.4 3.9	276	3	8233	320	1 2	9810	3/3
						1959	5	8520 10376	4.1	333 422	5	10386	408	5	8649 10495	340 412
														,	1047.5	412
91668	1	ı	11230	4.5	501	1956	1	11230	4.5	501	1	9860	412			
92173	4	6	8364	3.9	322	1955	1	8550	4.0	339	1	7390	351			
						1956	2	7355	4.1	301	2	10840	437	2	9979	386
						1957	3	8190	3.6	299	2	9855	380	2	10748	387
92422	42	50	9687	4.2	401	1956	3	9110	4.4	398	2	9140	379	1	9832	377
						1957	7	9157	4.2	384	4	10220	392	3	10780	421
						1958	13	9322	4.2	391	0	9117	356	7	9228	365
						1959	24	9806	4.1	402	24	9757	385	20	10145	397
						1960	3	9413	3.8	354	3	10447	386	1	10039	400
94423	1	1	9920	3.9	389	1957	1	9920	3.9	389						
94562	15	18	9452	4.1	368	1957	2	8460	4.4	365	1	10030	390	1	9919	398
						1958	5	9918	3.9	384	2	10095	390	2	8355	340
						1959	9	9701	4.2	408	4	10250	394	8	9907	383
						1960	2	8180	4.0	326	2	9250	338	2	10012	388
94852	69	75	10219	4.0	409	1957	8	9148	4.0	368	5	10506	416	5	10316	416
						1958	17	11039	4.0	446	. 7	10364	406	6	9770	372
						1959	39	10299	4.0	410	38	9689	388	29	10102	402
						1960	11	8902	4.1	361	U	9974	396	7	10651	416
95368	3	3	8297	3.5	290	1956	1	8380	3.7	311						
						1959	2	8255	3.4	279	2	13360	475	2	13690	566
96189	2	2	7530	3.9	300	1959	1	9800	4.1	402	1	3910	363			
	-	-				1960	i	5260	3.7	197	i	6530	267			
96526	2	2	9530	3.9	366	1956	2	9530	3.9	366	2	11175	419	1	9647	35.3
104768	2	2	8905	4.0	353	1959	2	8905	4.0	353	2	9145	367	1	9875	392

OH10

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

423

					KO3 1 K		STATE ON									
	OAUGHTER	AVERAGL	BY 51	RL							FRESHENING		A.V	VEADLY HE	שרו אענ	u Aca
SIRE NO.	DAUGHTERS NO.	RECOROS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.	MILK L8.	TEST PCI.	FAT L8.	305-DAY (RECURDS NO.	MILK LB.	FAT L8.	RECOROS NO.	MILK L8.	FAT LB =
							GUER	NSEY								
209432	1	5	7284	4.7	338	1947	5	7284	4.7	33 8						
225757	2	7	10079	4.6	461	1947 1949 1950 1951 1952 1955 1957	1	8820 14200 13350 9810 9000 12030 9630	4.7	664						
237/00	1	14	7663	4.7	359	1947 1948 1949 1951	1 1 1	7240 8000 7370 8040	4.9 4.6 4.6 4.7	354 367 339 376						
239361	1	14	5405	4.8	260	1948 1950 1951 1952	1 1 1	5410 5110 5950 5150	4.8 4.8 4.8	255 247 287 251						
240290	1	1	5ช70	3.9	221	1949	1	5870	3.9	227						
243477	1	2	5920	5.1	305	1948 1949	1	6340 5500	5.2 5.0	333 277						
243801	1	3	8213	5.1	417	1947 1948	2	7680 9280	5.1 5.0	395 463						
250198	18	46	7830	4.9	382	1947 1948 1949 1950 1951 1952 1953 1954 1955	7 3 9 8 6 5 3 3	7967 9300 7302 8763 8087 7944 7163 8810 9140	4.8 5.1 5.1 4.5 4.9	372 442 364	2 3 2 2 1 1	8837 8380 8160 6620	425 410 393 366 332 388	2 1 1	8481 8502 7619 8012	393 35.3
252152	12	25	8998	4.6	411	1947 1948 1949 1951 1952 1953	16 4 2 1 1	9536 7928 8430 11340 7700 6220	4.5 4.5	439 351 376 478 332 254	1	10270 8430		1	8785	409
252871	9	23	7300	4.6	332	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	1 1 4 3 3 2 3 2 1 2	5510 7320 6615 6380 7523 7050 6720 7530 6180 8890 7290	5.2 4.8 5.0 5.0 4.4 5.0 4.8 5.5 4.7	320 321 378	2 2 3 2	8575 8620	409 421 386 400 362 451	3 1 1	8284 9331 8611 8001 11053 8164	460 438 397 456
25 36 95	1	2	5500	4.8	264	1947 1948	1	4960 6040	4.6							
25 60 34	6	14	9328	5.0	461	1947 1948 1949 1950 1951 1953 1954 1955 1956 1957	1 2 2 2 1 1 1 1 1	7260	4.6 5.1 4.8 4.6 5.4 5.2 4.9 5.1 5.0	410	 	8920 10830 10390 9520 13320	420 496 496 439 503	1 1 1 1	10115 10824 9668 9712 11914	500 453 458
256219	3	7	7746	4.4	341	1948 1949 1950 1951	1 3 2 1	7260 7693 7635 8520		344 344 346 410						
256236	3	14	7857	4.9	380	1947 1948 1949 1950 1951 1952	2 1 2 2 3 3 1	6285 7030 7455 7860 8167 8183 7920	4.9 4.9 4.6 4.8	297 355 364 388 378 396 387	1	7120 5370 7950 8170 7220	357 258 375 384 358	1	8219	395
258185	5	9	7154	4.8	341	1947 1948 1949	3 1 5	7917 8380 7203	4.6 4.6	375 385 328	1	8/40	457			

0H10

TABLE 15.--DAOGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY DREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRL

SIRE NU.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RLCOROS NO.			FAT LE.	305-DAY C RECORDS +0.		FAT	YLARLY HE KLCOKDS NO.		FNT
						1950 1952	60екі 1 1		4.7 5.0	344 280	1	49/0 7870	249 370			
25855	3 6	16	5658	4.8	266	1947 1948 1949 1950 1952 1953	6 5 2 1 1	5310 5524 8030 7110 6580 5300	4.9 4.9 5.4 5.1	258 264 386 387 536 264	1 1 1	9470 8950 7670	496 420 345	1	7554	3oB
25954	2 1	1	8090	4.6	375	1947	1	8090	4.0	375						
26095	8 3	5	8922	4.2	372	1947 1949 1955 1956 1957	1 1 1 1	10180 7440 7220 9920 10300	3.7 4.1 4.1 4.7 4.8	393 303 298 468 490	1	7580 /120	347 324	! 1	7096 71 7 2	
26148	6 3	3	6200	5.0	304	1947 1943	1 2	5130 6735	5.4 4.8	277 518						
26408	3 I	1	7710	4.4	331	1948	1	7710	4.4	331						
26514	t 4	15	7630	4.8	365	1948 1949 1950 1951 1952 1953 1954	1 3 1 3 2 3 2	7340 7773 8040 7587 7040 7690 8380	4.9 4.7 5.1 4.9 5.2 4.7 4.4	359 366 412 367 362 356 365	1 2 1 3 2 3 2	7100 8415 9300 7920 7780 7570 7860	303 422 443 391 374 364 364	3 2	7648 785 I	3/1 3/8
26759	3	5	6798	5.3	365	1947 1948 1949	3 1 1	7230 8120 5470	5.3 6.2 5.9	390 501 321						
27089	2 18	35	7296	4.8	349	1950 1951 1952 1953 1954 1955	2 11 4 2 6 2 1	7220 7605 6830 7235 6753 8490 8890	4.6	341 374 344 349 311 384 402	1 4 7 6 2	9410 8140 8483 8337 7817 7685 6120	416 399 388 372 359 358 289	6 5 1	8226 8851 7892 7096	391 398 376 325
27237	7 5	17	9194	4.5	410	1951 1952 1953 1954 1955 1956 1957	1 2 3 3 3 2 2 2	6040 8085 9170 9573 10427 10335 8225 7850	4.5 4.6 4.2 4.3	281 331 408 440 440 444 366 358	1 2 2 1 1	7100 8365 8705 8640 8880	360 381 404 400 420	2 2 1 1	8617 9227 7892 8567	411 396
27258	5 2	10	7978	5.2	409	1948 1949 1951 1952 1953 1954 1956	1 1 1 1 1 1 1 5	7860 6820 8490 9170 9030 9340 8930 7330	5.7 5.5 4.5 5.7 5.7	459 402 468 507 410 528 505 382	1 1 1 1 1	8700 10230 9730 7560 9470 8920 9013	379 507 469 365 475 405 428	1 1 1 5	7979 9178 9385 8379	391 463 452 402
27538	9 46	105	7249	4.7	337	1949 1950 1951 1952 1953 1954 1955 1956 1957	1 14 16 25 18 16 7 4 2		4.7 4.7 4.7 4.8 4.9 4.0 4.2		3 13 15 15 7 4 1	7877 8578 8879 8997 8319 10429 8945 7350 7490	363 368	1	8431 8727 10129 9129 8262 8437	393 428 421 390
27628	3 1	1	10000	5.0	500	1952	1	10000	5.0	>00c						
27/16	5 6	14	8465	4.9	412	1948 1949 1950 1951 1956	4 4 1 1	7708 7295	4.9 5.2	370 358 431	1	12//0	518			
27749	28 2	2	9375	4.7	441	1947 1952	1	7660 11090		355 326						
27039	1	3	9107	5.0	451	1948 1952 1953	1 1	9 7 80	5.0 5.0 4.9	488 435						
28366	5 10	26	8310	4.8	343	1949 1950 1951 1952 1953 1954 1955	3 6 2 4 3 3 2 3	8893 8888 9235 8740 7903 6367 7670 6463	5.0 5.1 5.4 4.0 4.7	443 459 459 372 292 373	2 1 2 3 3 2 2	7947 8683 8910	418 415 377 372 340 424 331	2 1 2 2	9554 0922 6153 7913	320 311

0HI0 425

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY EXECU.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIR!

SIRE NO.	OAUGHTERS NO.	RECORDS NO.	MILK L8.	TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.		305-DAY I RECORDS NO.	CONTEMP MILK Lb.	FAL	YEARLY HE RECORDS NO.	RO AVE MILK LB.	EAF
						1958 1959	GUERI I I	11210 9290		509 436		11.30 9610	476 497			
283950	8 4	194	8132	4.6	370	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 6 10 18 27 31 26 26 18 16		4.0	413 388 393 375 397 343 378 402 387 405 324 478	1 4 8 18 21 27 18 15 12 11	8724 9283 8523		1.5 1.5 2.0 1.7 1.0 1.0 8	8665 7857 8699 9069 9300 9352 9277	362 371 461 427 400
285563	6	12	8000	4.7	37 ₆	1951 1952 1953 1954 1955	2 5 1 3 1	8590 7546 6710 9110 7820	4.1	403 349 318 429 353	1 2 1 3	7550 8590 7520 8827 8950	376 392 376 399 409	1 3 1	7641 8175 7892	
285933	12	35	7873	4.8	372	1947 1948 1949 1950 1951 1952 1953	5 9 7 3 3 4 3	6082 7987 8684 8925 8237 7490 7823 9730	4.9	289 383 401 394 369 354 381 436	1 1 2 3 1		412 412 347 379 366 394	3 1	7430 7543	
286293	Ļ	8	8064	4.6	369	1947 1948 1949 1950 1951 1953	2 1 2 1 1	7360 9130 9145 7270 8640 6670		367 385 403 339 335 266	1 1 1	8470 7930 7460 7720	.389 365 351 355	1	7052	385
286937	3	3	7333	4.8	355	1949	3	7333	4.8	355						
287749	13	27	6983	4.5	313	1953 1955 1956 1957 1958 1959 1960	1 2 8 4 8 3	3600 7350 7141 7358 8350 8787 9600	4.4 4.3 4.7 4.5 4.2 4.7 4.2	158 313 329 329 351 413 401	1 1 2 3 2 1	8320 8260 8823 8445 7930	310 358 379 404 396 334	1 1 2 3 2	8622 7783 8230 8878	366 352 350 386 429
288783	39	97	8279	4.8	393	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	2 1 8 16 16 14 11 10 6 5 4	8330 7300 8359 8359 8761 8596 8208 8798 8800 9016 8293 6580	4.8 4.6 4.7 4.6 4.6 4.6	3/3 357 400 383 407 401 376 412 402 410 362 317	1 8 11 12 9 9 6 4 4	8820 9835 8304 9468 7991 8611 10048 9408 10055 7313	393 442 423 377 413 364 378 450 407 453 352	10 10 9 6 4 4 3	9387 7922 5371 9699 9510 9521 7336	407 303 373 427 414 412 375
288933	8	18	8520	4.7	398	1947 1948 1949 1951 1952 1953 1954 1955 1956	2 1 4 1 2 2 3 1 1	9245 6620 8080 8610 9915 11210 10633 7200 10570	4.6 4.0 4.4 4.5 3.9	405 315 402 371 451 446 467 324 416 433	1 2 2 2 1 1	9990 8550 8095 10455 9500 8360 9490		2 3 1 1	8545 8560 10366 10159 9374	545 500
283934	41	124	8557	4.7	396	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 6 11 26 18 16 15 12 6 4 6 2	9380 8387 7895 8118 8777 8332 8895 9222 8743 7510 8987	5.6 4.8 4.7 4.6 4.5 4.5 4.5	472 420 376 387 411 357 345 411 389 326 384 487	1 2 7 16 15 13 15 11 6 3 6	9510 8030 8067 7977 7869 8122 8370 8865 9170 10290 10023 9295	358 363 382 402 392 407	11 11 10 11 5 4	9169 7944 8386 9019 8212 9271 9077	372 385 414 365 464
284033	6	13	7701	5+1	392	1950 1951 1952 1953 1954	2 3 2 4 2	8548		423 357 374 434 326	1 1 1 2	7810 7460 7170 7085 6750	344 365	1	6998 62 7 8	321 21)

01H0

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELOING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHLNING--RECORDS FROM THIS STATE ONLY

ι	AUGHTER	AVERAGE	BY SIR	RE		R	ECORD AVE	3Y →1R	E OY	FRESHENING YEAR						
SIRE UA	NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECUROS NO.		TEST PCT.		305-DAY (RECORDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							GUERN	ISLY								
289148	4	14	7421	4.8	354	1947 1948 1949 1950 1951 1953	6 1 2 1 3	6830 6550 7425 7620 8137 9090	4.8 4.6 4.9 4.0 4.6 4.2	330 300 363 350 374 381	2	8045 8410	404 370			
289179	1	9	7488	4.6	345	1948 1949 1950 1951 1952 1953 1954	i 1 1 1 1 1 2	8010 8250 6960 8080 8880 6900 7440 6435	4.7 5.1 4.9 4.7 4.0 4.4 4.1	379 423 341 377 410 303 302 284	i 1 i i 2	7880 8440 9110 7540 7975	385 403 364 332 323	2	7837	286
289531	ł	1	6270	5 - 1	321	1951	1	6270	5.1	321						
289677	1	2	6540	5.4	351	1952 1954	1	6480 6600	5.3 5.5	341 301						
290779	1	1	9610	4.2	406	1951	1	9610	4.2	408						
291657	3	5	6605	5.5	353	1949 1950 1951	2 1 2	5550 6240 9085	5.8 5.2 5.0	313 324 455						
293096	2	4	8135	4.4	356	1948 1949 1950 1953	1 1 1	7680 6220 8720 8730	5.0 4.5 5.0 4.0	387 278 434 345	ì	6750	383			
2942∠9	22	51	7813	4.9	38∠	1950 1951	2	7985	5.0	398 405	1	8290	434			
						1951 1952 1953 1954 1955 1956 1957	2 11 14 10 7 3 1	8070 8814 7399 7735 6941 7193 6240 5900	4.7	405 439 376 381 336 356 296 306	6 10 8 7 3 1	8090 7988 7898 8546 8513 8260 6920	381 355 348 381 386 381 389	6 5 5 2 1	8235 7750 8162 8851 6671 8230	376 350 363 391 304 391
294378	12	27	8244	4.5	37∠	1951 1952 1953 1954 1955 1956	2 5 5 3 2 2	8905 8495 7304 7196 8810 11045 9700	4.6 4.8 4.6	409 386 347 335 376 443 406	4 4 5 2 2 2	9335 9093 8670 10595 9665 8635	390 381 374 421 437 417	3 5 3 2 1	8684 8417 10170 9582 8709	363 372 394 428 404
294533	5	16	7890	4.8	378	1949 1950 1951 1952 1953 1954 1956	2 3 3 2 2 1 2 1	8655 7637 9453 9415 8955 11090 6025 5900	4.6 4.6 4.9	408 366 437 428 432 481 304 299	1 1 1	8800 9630 9380 8510	421 460 446 428	1 1	9014 9581 10159	437 465 500
294 7 55	g rt	40	7894	4.8	376	1948 1949 1950 1951 1952 1953 1954	2 6 8 9 5 6	7100 7662 8554 7609 8812 8530 9000	4.8 4.7 4.9 4.7 4.7	328 366 405 370 416 397 422	1 2 2 2 4 3	7470 8095 12165 11020 9310 8247		4 3	8799 9436	
294792	32	80	8887	4.7	413	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	3 5 10 6 5 7 9 9 5 8 8	9313 7386 8905 9505 8846 8229 9028 10000 8960 9508 9796 10440 6500		486 361 417 456 414 387 425 480 417 416 454 434 282	1 1 2 6 4 4 5 2 2	9420 9990 8630 9295 8520 11455 11233 9198 9275 10315 9570	408 469 426 417 393 471 462 404 427 471 381	6 4 4 4 2 2	8537 11325 10677 9491 9532 9342 8502	403 471 452 418 432 439 373
296007	1	1	10690	5.3	569	1959	1	10690	5.3	569	1	10440	495			
296949	1	3	7557	4.1	303	1949 1950 1951	1	7540 7700 7430	4.1	312 317 295						
297717	6	21	7971	4.7	377	1949 1950 1951 1952 1953 1954 1955	5 5 2 2 1 1	8672 7574 7285 6465 6820 6490 8070		415 374 352 310 336 267 399		8460 7960 7510 6570 6350 6280	421 413 359 300 286 305	1	8306 6922 6943	

4.6 4.0

4.6

4.5

4.6

οí

:76

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY DREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

0HI0

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.

	DAUGHTER	AVERAGE	8Y S1	RL		К	ECORD AVE	KAGE I	BY SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	LAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	KECORDS NO.		TEST PCT.		305-DAY (RECURUS NO.		FAT	YEARLY HE RECORDS NO.	MILK	
						1955	GUERN 5	902b	4.6	410	5	8316	385	5	8216	377
						1956 1957 1958	3 2 1	6797 7440 6990	4.8 4.5 4.6	322 317 321	2 2 1	8925 10505 11760	359 417 487	2	10252 9156	471 416
						1959 1960	2 1	9040 9220		373 371	2	8595 11500	394 534	1	9060	401
314554	. 1	3	7150	4.7	339	1954 1954		8900 7120 5520		445 326 245	I 1 1	7350 7520 6700	356 344 287	1	8306 6922	390 320
318787	9	11	8210	4.5	368	1954 1955 1956 1958 1959	3 4 2 1	7627 8915 7365 9050 9550	4.3 4.9 5.0	354 362 356 452 410	2 3 2 1	7865 8177 7750 8440 11160	382 390 341 410 512	2 3 2 1	7827 8502 8791 8153	357 383 381 387
322433	3	5	8002	4.7	382	1953 1956 1957 1959	I I I 2	6630 6570 7900 10140	4.3 4.4	320 281 345 512	1	11470 8920	423 431	1 1 1 1	9178 9581 10508 9810	423
324734	10	24	688 I	5.0	344	1947 1949 1950 1951	1 4 6 3	8500 6743 6738 7050	5.0 4.9 4.6	454 333 331 341	1	6480	345			
						1952 1953 1954 1955	3 3 3 1	7077 7663 7473 7950	5.0	372 353 375 444	1	8060 7780	407 418	1 1	8676 8971	44 I 44 7
326192	2 9	19	7741	4.6	357	1954 1955 1956 1957 1958 1959	5 2 4 3 1	7760 8220 7313 8920 7490 7890	4.5 4.7 4.4 4.0	363 374 344 391 301 377	5 5 4 3 1	9148 8304 8218 8830 6550 13310	406 379 382 366 281 517	4 4 4 3 1	8396 7818 8802 8760 8339 12252	367 398 362
327427	7 11	58	8844	4.7	414	1947 1948 1949 1950 1951 1952	6 6 5 4 5	8655 8238 9416 8738 9234 9598	4.7 4.5 4.7 4.5	415 384 423 406 411 437	1	8920 8470	422 409			
						1953 1954 1955 1956 1958	1 3 1 1	7290 11240 9350	4.4 3.8 4.5 5.1	448 409 277 503 475	1	8000 8710 8860	396 422 437	1	8524 8001 8164	474 397 419
329150	56	109	8180	4.7	383	1959 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 2 5 11 13 12 16 17 15 8	10120 6960 7206 8423 8549 8063 8688 8421 6388 8568 8243	4.7 4.7 4.7 4.6 4.6 4.7 4.7 5.1	325 339 397 400 371 399 397 388 432 377	1 0 11 11 15 16 14	7370 9092 8144 8636 9554 9459 10401 9591 8977	427 375 385 424 433 466 428	5 9 9 15 10 4	8731 8500 8582 9379 9437 9312 8930	391 412 418 442
3297∠i	7 3	9	8092	4.6	366	1953 1954 1955 1956 1957	2 3 1 2 1	7707			2 3 1 2 1	8210 7640 8360 7680 10090	362	1 3 1 2	8012 7579 9581 7462 9221	355
330093	3 90	197	7328	4.7	342	1953 1954 1955 1956 1957 1958 1959	7 56 41 40 25 17 8 3	6551 7654 7561 7550 7846 9371 9054 9257	4.7 4.7 4.8 4.7 4.4	298 359 352 355 375 435 399 397	7 47 33 30 18 13 5	7774 8509 8733 8693 9414 11012 8328 8315	362 397 397 406 440 481 415 395	7 43 31 27 13 7 3	8223 8336 8289 8682 8478 8787 7895 9625	403 400 427 400
331204	4 1	1	9760	5.0	485	1960	1	9760	5.0	د 48	1	10760	534			
33179	1 i	1	6770	4.7	320	1959	i i	6770	4.7	320	1	8150	315			
33315	. 49	88	7743	4.8	370	1952 1953 1954 1955 1956 1957	1 5 21 21 17 10	7486 9750 8044 7716 7851 7555	4.8 4.6 4.8 4.7	370 461 384 371 378 354 366	4 14 16 2 7 8	9145 8494 9153 9131 9316 10113	443 396 414 419 425 431	13 15 14 6 5	9120 8775 9305 8842 9023	398 423 405 352
						1959	3	9037	4.7	425	3	11567	490	2	12296	472

1951 1952 1953

334282

130

260

7964 4.7 3/6

6810 5.0 343 8167 4.7 381 8125 4.8 390 1 8190 377 9 9366 418 25 9049 402

17 8491 385

0HI0

TABLE 15.--DAUGHTER-AVERAGE OF SINCS IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	D.1.00111.E11		0. 31.			,,	EGOND NY	LINAUL I	,, ,,,,		, KESHEMINO	LEAN				
SIKL NO.	DAUGHTERS NO.	RECOROS	MILK LB.			FRESH YEAR	RECORUS NO.		TEST PCI.		305-DAY RECORDS NO.			YEARLY HECORDS NO.		
						1954 1955 1956 1957 1958 1959 1960	GUER 67 37 34 26 21 16 4	NSEY 8062 8182 7868 8037 8380 9025 7373	4.7 4.8 4.8 4.7 4.8 4.7 4.8	579 591 374 378 400 427 315	52 35 23 20 17 13	8509 9326 9256 10748 9302 8938 7548	383 411 407 435 430 412 372	41 29 23 16 8 11	8640 8890 9404 9095 8670 8266	396 411 414 402 412 500
334545	2	4	7160	5.1	366	1955 1958 1960	1 2 1	5940 7970 9200	5.0 5.2 5.3	296 412 485	1 1 1	9520 757 0 8680	397 349 375	1 1 1	8949 8066 9069	363 363 398
335524	, łţ	11	7 389	4.8	353	1951 1952 1953 1954 1956	2 4 2 1 2	9375 6675 7966 9900 7495		459 345 405 530 350	1 3 2 1 2	8670 7363 8220 7530 7925	406 340 374 391 369	2 1	8050 6050 8317	368 250 404
330053	42	121	8247	4.8	399	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 6 15 23 16 12 16 10 11 8	7373 6683 7671 7843 8300 8049 8382 7618 8771 9088 7990		389 392 373 381 395 374 398 366 424 446 391	2 4 8 16 13 11 13 10 6	8580 8358 8544 8338 8841 8844 8545 9136 9277 9106 9400	383 370 399 377 395 393 394 413 438 424	11 7 9 8 4 4	8638 9060 8575 8570 8031 8668 9005	392 411 392 378 309 394 229
338962	3	5	8033	4.7	367	1953 1954 1959	1 2 2	8410 6585 9680	5.3 5.1 4.0	444 333 388	1	/2/0 8220	348 373	1	6856 9483	338 434
340985	1	1	11250	4 - 4	499	1759	1	11250	4.4	449	1	10470	472	1	10442	477
342310) 4	11	8369	4.5	371	1952	2	66 7 0 8290	4.0	304	1 2	7540 6915	344	1	W704	700
						1953 1954 1955	2	9185 950u	4.6 4.4 4.3	360 403 411	1	7610	347	1	8306 9581	390 439
342722	. 1	1	10110	4.4	448	1950	1	10110	4.4	448	•	1010	371	·	7301	437
345079		43	7922	4.8	382	1952 1953	2	7140 7416	4.8	335 361	2 ti	8265 7 596	386 354	6	7975	375
						1954 1955 1956 1957 1958 1959	9 4 5 3 2	6717 8431 7983 9988 8977	4.6 4.9	322 387 389 497 473 487	9 9 4 4 3 2	9158 9292 9348 9780 9477 10050	407 405 429 458 451 472	8 9 4 4 2 2	8857 8761 9813 10363 9102 8726	398 400 450 481 474 404
345312	! 12	16	9040	4 - 4	394	1953 1954 1955 1956 1957 1958 1959	1 4 3 5 2 1 2	12900 7200 8027 9134 10030 10260 10995	4.7 4.6 4.3 4.4 4.1 4.4 3.9	601 333 344 405 403 456 429	1 2 3 2 1 2	6180 8965 11113 13740 9640 10940	375 399 422 461 431 457	1	8524 7935 7892 8753 12884	393 360 356 391 464
346065	9	12	8045	4.7	37∠	1955	1	9770	4.4	427	į.	11460	466	1	10584	488
						1956 1957 1958	4 3 1	7525 8203 5740	4.8	350 393 264	1	9110 9950	407 481	1	8889 93 7 4	4/16
						1959 1960	2	7950 6730	4.9	390 280	1	8610 9840	376 374	1	8502 10388	373 413
346204	9	23	7727	4.9	376	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 2 2 5 2 2 2 2 3 2	7140 8665 8160 7372 8400 9115 9065 7790 8345 6880	4.7 4.9 4.7 4.6 4.6	357 416 384 354 387 431 413 356 409 328	2 4 2 2 2 3 2	8065 8638 9145 9230 9785 9823 8920 9070	367 409 414 403 402 403 442 422	2 1	885 7 8 5 02	
340682	2 3	9	8116	4.9	389	1949 1950	1	8590 9850	4.3 4.6	370 451	1	10390	503			
						1951 1952 1953 1954	2 2 2 1	7655 7385 7036 6960	5.3 5.2 4.7	399 375 327 301	1 1 1	7550 5370 8260 7190	347 269 423 357	1		385 334
354073	3 1	2	8470	4.8	409	1958	2	8470	4.8	409	1	9600	477			
354224	15	35	/ 408	4.7	346	1953 1954 1955 1756 1957 1958 1959	2 3 7 9 8 2	5520 8587 7750 7839 6453 6940 6590	4.2 4.7 4.1 4.6 4.5	2/9 362 365 367 291 314	2 6 0 5 2	8345 8255 8637 8713 8278 7000 9050	38 I 326	2 2 5 6 5 2	8568 7756 8945 8464 7787 6943 8251	415 365 375 391 358 317 396
						1,37	2	0370	4.0	295		,0,0	723		0231	370

0H10 45G

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

8078 4.4 353

8618 391

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING CRUANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

8080 404

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPED BY BREED. BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

	UAUGHIER	AVERAGE	D1 211	C		K	ECURD AV	ERAGE E	4 21K	E BY	FRESHENING	TEAR				
SIRE NO.	DAUGHTERS NO.	RECUROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RLCORDS NO.	MILK;	TEST PCT.	FAT	305-DAY (RECURDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
							GULR	NSEY	4							
410890	0 2	7	6804	4.4	310	1954 1955 1956 1957 1958 1959	1 1 2 1 1		4.6 4.6 4.7 4.7	464 505 316 513 484 404	1	7090	347 365 330 357 334 335	 	6943	359 386 364 340 317 348
4115 8 9	0 57	103	9429	tt • ft	408	1954 1955 1956 1957 1958 1959 1960	1 20 29 19 16 15 3		4.4 4.3 4.2 4.5 4.5	457 432 384 385 435 470 494	1 19 22 13 12 13 3	8840 9903 10187 10310 10105 9932 8600	405 438 453 458 458 458 452 409	16 16 10 9 12 2	9363 9385 9275 9659 10492 8982	422 375 433
41196	7 1	2	4850	5.4	258	1955 1956	1	5020 4680	4.6 6.1	230 286	-	8680 7350	387 337) 1	8524 7859	386 364
41198	y 7	8	7901	5.0	394	1958 1959 1960	1 6 1	8050 8083 7100	4.8 5.0 5.2	388 404 367	1 6 1	12720 8448 9910	444 393 463	1 4	8644 10047	3/1 438
41356	6 1	1	9580	4.2	405	1958	1	9580	4.2	405	1	10190	409	1	10987	464
42150	9 4	12	9263	4.2	363	1954 1955 1956 1957 1958	3 3 1 2 3	8617 9233 7570 7465 10403	4.4 4.3 4.7 3.9 4.0	375 389 352 288 413	3 1 2 2	8540 7550 8560 7280 8615	361 330 357 318 388	3 3 1	8593 8673 7968 7554	365 368 344 316
42253	8 1	1	11700	4.3	506	1958	. 1	11700	4.3	506	1	10630	486	1	11652	516
42434	3 I	1	8480	4.6	387	1959	1	8480	4.0	387	1	11600	379	1	10944	424
42605	9 1	3	8053	4.2	336	1956	1	9710	4.2	407				1	8938	436
						1957 1958	1	7160 7290	4.2	301 300	1	6300	323	į	8415 8426	403 396
426 82	0 2	3	7983	4.7	374	1956 1959 1960)) 1	7530 8680 8190	4.6 5.0	343 401 409	1	10420 10070	398 382	1	8916	367
42929	5 7	8	8131	5.0	399	1957 1958 1959 1960	1 4 2 1	3860 8638 9195 10310	5.9 4.7 5.3 4.9	228 599 478 508	1 3 2 1	8920 10500 9720 10620	400 421 449 480	1 3 2	9003 9251 9974	
43338	4 3	4	5880	4.6	268	1954 1955 1957 1959	1 1 1	5980 7650 4470 5600	4.6 4.8 4.7 4.3	274 368 208 243	1	6690 7150 6010	307 328 270	1 1 1	7085 8251 5744	
43467	8 1	1	10860	4.5	490	1958	1	10860	4.5	490						
437 28	2 2	3	9225	4.4	401	1955 1956 1957	1 1 1	9890 8800 8320	4.5 4.5	399 394 409	 	11540 8020 8490	494 364 376	1	10584 8371 8208	468 384 376
43728	3 I	1	9830	4.7	460	1959	1	9830	4.7	460	1	11330	470	1	10682	479
43908	5 1	2	9720	5.3	509	1956 1957	1 1	9980 9460	5.1 5.4	509 508						
44405	2 I	1	6470	4.8	311	1958	1	6470	4.8	311						
Կ Կ Կ Կ Կ I	8 11	23	8623	4.5	384	1953 1955 1956 1957	2 5 3 4	8708 9616 8293	4.4 4.5 4.6 4.6	368 373 435 384	1 2 5 3	9762 10350	432 451 471	1 4 3	9614 8753	408
						1958 1960	6	8798 10580	4.7	413 429	ć I	10172 9940	444 469	1	8295	378
44570	5 8	11	8586	4.9	418	1958 1959 1960	2 7 2	10040 8139 9580		473 395 505	1 6 1	9650 10800 11170	429 465 507	1 3 1	8753 11409 9080	4/5
44630	9 2	3	9793	4.3	420	1953 1956 1957	1	11480 8490 10710		538 330 481	1	11370	373	1	10987	348
45179	2 1	ک	9343	4.9	453	1953 1957 1958	1 1 1	10310 9200 8520		452 485 42 l						
45245	4 2	2	10290	4.7	480	1959 1960	1	11430 9150		490 470	{	8760 9590	3/9 404	1	8219	371

4.8

5290 4.6 243

TABLE 15.--DAUGHTEK-AVERAGE OF SIKES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

4 - R

4.6

4.6

RV4B

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRECOING ORGANIZATIONS--GROUPEO BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	BY YEAR	OF FRESI	HEN ING	RECO	RUS FR	OM THIS	STATE ONL	. Υ								
	OAUGHTER	AVÉKAGE	8Y 51	RÉ		R	ECORO AVI	KAGE E	Y SIR	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECORUS NU.		TEST PCT.		305-GAY (RECORDS NO.	MILK		YEARLY HE RECOROS NO.	MILK	
							HOLST	FÉIN								
666968	54	84	11266	3.6	395	1947 1948 1949 1950 1951 1952 1953 1954 1955	17 16	10323 10968 12208 11059 12816 11500 13393 12550 12305 9895	3.7	348 393 419 378 451 393 480 404 393 343	1 2 3 1 2 2	13660 13690 16600 12683 11370 10705 12000	482 475 577 445 392 388 410	2 1 2 2	11489 10529 11325 11004	398 368 379 375
667/91	1	1	13150	4.0	528	1949	1	13150	4.0	528						
675043	1	1	10690	3.0	32 s	1947	1	10690	3.0	323						
679651	1	6	12898	3.6	468	1949 1951 1952 1953 1954 1955	i i 1 i 1	11610 12610 11160 12550 14540 14920	3.9 3.4 3.6	404 486 377 451 559 531	1 1 1 1 1	13250 11860 12520 12350 13860 12230	461 421 422 451 486 438	1 1	11358 11837 12263	
688260	2	5	12308	3.1	382	1950 1953 1954 1955 1956	1 1 1 1	13530 12170 9580 9320 13270	3.0 3.0	433 348 287 276 413	 	11560 11400 13440 9160	392 386 475 315	1 1	1104 <i>2</i> 10159 12110	401 363 412
688763	1	7	12684	3.7	475	1947 1948 1949 1950 1952 1953	2 1 1 1 1	11730 13960 10980 12430 15160 12800	3.8 4.0 3.7 3.9	423 534 435 456 597 456	2 1 1 1 1	14705 13240 10110 11700 14690 12440	466 472 370 423 544 447	1	12208	438
689195	36	84	10347	3.6	374	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	15 14 10 14 13 7 6 1	11001 9201 10535 10447 10748 11249 10180 11540 10050 11120 10270 11230	3.6 3.8 3.6 3.7 3.9 3.8 3.4 3.4	389 328 393 377 401 415 396 436 346 383 358 396	1 2 5 4 2 6 1 1 1 1 1 1 1	7850 11165 12267 12680 13595 11517 12050 9110 10670 11950 4320	342 434 466 438 492 407 428 313 383 406	6 1 1 1 1	12185 11532 9843 11434 11609 11380	434 412 329 395 397 423
693386	2	5	8492	3.1	261	1947 1948 1950 1951	2 1 1	10330 8070 6880 6640	3.6	322 293 248 227						
697599	34	96	11132	3.4	380	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957		9210 10988 12500 11015 10948 11550 11047 10213 13197 11060 12175 11870	3.4 3.6 3.4 3.4 3.5 3.5 3.5	297 376 419 370 390 396 369 357 442 398 404 393	10 14 10 3 4 2	9980 11026 11109 10524 10960 10887 11233 10975 11630	415 411 374 395 407 396 393	8 3 3 2	10627 11096 10678 11330 11614 11718	401 392 421 422
703455	1	2	15550	3.8	583	1954		15410		581		15330			15347	
716630	10	25	11839	3.7	435	1955 194 7 1948 1949 1950 1951		15690 11858 12819 13834 14650 15510	3.6 3.7 3.6 3.7	448 475 490 536 528	,	14310	505		15184	32.1
725852	3	5	12060	3.3	392	1947 1948 19 49	3 1 1	12907 14040 9800	3.5	405 485 326						
127609) 1	6	11387	3.7	421	1949 1950 1951 1952 1954 1955	1 1 1 1 1	12810 10100 11630 11680 12060 9840	4.0 3.8 3.8 3.5	478 400 447 441 422 335	1 1 1 1 1	12420 11450 11950 11920 14020 13670	425 404 409 436 495 470		11837 12263	
733976	5 1	5	10084	3.5	357	1950 1951	i 1	7860 9680		286 341	ì	10650	375			

0H10 435

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL DREEDING ORGANIZATIONS--GROUPLD BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

					KOZ FR		STATE ON		1W . 3.00	E /220	COL CHEAT.	VE A				
	DAUGHTER	AVLKAGL	87 511	K E		R	ECORD AV	ERAGE 8	NY SIR	F 84	FRESHENING		AV	YLARLY H	FRU VAL	ol A (a l
SIRE NO.	DAUGHTERS NO.			TEST PCT.		FRESH YEAK	RECURUS NO.	MILK L8.			RLCDRUS	MILK LC-	FAT	RECDROS NO.		
						1953 1955 1956	HOLS 1 1	TE1N 12310 14500 6070	3.5	442 514 201	1	12670 13630 9830	445 470 340	1	10017 11946 11140	370 428 379
735351	1	2	12620	3.3	419	1953 1954		13110 12130	3.2 3.4	424 413						
7379 15	1	3	9800	3.8	372	1949 1950 1951	1 1 1	11200 10070 8130	3.9 3.8	433 383 301						
739007	1	4	12260	3.5	425	1949 1950 1951	1 2 1	13540 11725 12050	3.5 5.5 5.6	445 411 432						
739983	12	ц9	10383	3.4	354	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	3	11194 12580 12173 11633 12820	3.5 3.4 3.3 3.2 3.1 3.3 3.3	518 550 371 587 377 419 599 361 419 457 435 479	1 1 3 1 3 3 2 2 2 2	11570 10650 15450 11897 15260 12763 11733 12870 12590 11535 13900	583 547 413 537 450 412 444 430 414	3 2 2 2	11333 11129 12966 12786 12034 12644	386 446 453 418
741327	25	68	12635	3.4	435	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	5 8 9 6 7 8	12865 14436 12805 13183 12392 9600 8570	3.5 3.4	456 474 409 407 439 501 462 460 466 330 244 308	3 7 1 5 4		420 455 452 456	5	12269 12415 12494 11707	433 441 428 402
743481	1	2	12120	3.0	363	1948 1949	1	12420 11820	2.9 3.1	355 371						
747242	! 1	1	15660	3 • 1	488	1953	1	15660	3.1	488						
749057	' 2	8	12975	3.8	489	1949 1950 1951 1952 1953 1955	1 1 1 2 1	13480 16030 13180 12865 15860 14190 13600	3.8 3.8 3.9 3.9 3.7 3.7	508 603 516 495 580 527 491	. I	9150	330 446 455 391 502			
750270	1	1	8090	3.5	283	1952	1	8090	3.5	263						
7 50401	7	23	11009	3.6	392	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	3 1 2 4 3 3 5 1 1 1		3.6 3.6 3.7 3.5 3.4 3.3 3.5	446 480 426 457 412 332 301 420 318 447	2 3 3 1	11917 11690	396 422 401 369 306		10802 12012 9025	425
75 13 10	1	3	11257	3.6	408	1949 1950 1951	1 1 1	11600 11070 11100	3.6	426 401 396						
754288	3 8	16	10563	3.5	363	1947 1949 1950 1951 1952 1953	6 1 2 4 2 1	9530 9740 10775 11310 12285 11880	3.3 3.3 3.4	358 305 347 366 411 375	1	108/0 11150 12010	368 380 380	1	10584	358
756139) 1	4	10613	3.3	352	1951 1952 1953 1954	1 1 1 1	12210 8100 9570 12570	3.5 3.1	428 286 294 401	1	13280 11580 12020 12150	426 393 378 408	1	10584 10726	
757590	i 1	3	11980	3.4	413	1951 1952 1953	1 1 1	13590 12910 9440	5.7	498 479 261	1	11160 8350 8320	417 336 290			
75885.	3 1	3	12407	4.0	493	1948 1949 1950	1	12270 11950 13000	3.9	469 463 548						
76 12 92	2 100	256	10904	3.7	395	1947 1948 1949 1950	2 3 13 33	9905 13160 11678 11707	3.4	375 452 419 422	1 2	14270 11965 11810	493 420 424			

3.7

3.8 3.8

3.7 11923

 11799 413

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

		HECOMOS THOM	THE STATE SHET	
OAUGHTER	AVERAGE BY SIN	Ε	RECORO AVERAGE	

	OAUGHTER				NO3 IN		ECORO AVE		Y SIR	E 8 Y 1	FRESHENING	YEAR				
SIRE D	AUGHTERS NO.	RECORDS NO.		TLST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		305-0AY (RECORDS NO.			YEARLY HI KECOROS NO.	MILK	
						1954 1955 1956 1957 1958 1959 1960	21 10 6	TEIN 11928 12203 12103 1193d 13553 12547 10450		430 430 414 401 491 425 310	6 2 3	12143 12254 12905 12115 11480 11820 10700	414 420 425 400 415 418 372	12 19 8 6 2 3	11745 11666 12436 12313 12688 11430	411 396 423 400 454 394
782488	11	27	12379	3.4	419	1947 1948 1949 1950 1951 1952	4 6 6 4 2	12280 10053 13060 11728 12378 13560 11780	3.3 3.4 3.5 3.4 3.5 3.4 3.1	398 339 463 398 426 464 364	1	11200	505	1	12688	438
782691	235	616	12462	3.4	418	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 12 21 48 83 92 95 79 71 4d 31 20 14	11450 12822 11967 12508 11957 12414 12320 12287 13104 13132 13307 14102 13861 13560	3.3 3.4 3.3 3.4 3.3 3.4 3.3 3.4 3.3 3.4 3.3	377 426 409 415 406 414 412 409 433 440 453 488 404	2 4 17 38 61 89 79 69 47 30 14	12935 9595 12186 12393 12239 11820 12112 12224 12534 12466 12593 12630	446 352 437 438 435 414 429 436 449 448 463 467	67 67 61 43 29 13	11940 11822 12007 12737 12654 12640 13014	426 415 427 452 451 455 483
783455	7	18	11899	3.6	422	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 1 3 4 4 2 1 1	11770 17880 12260 11978 11805 1078≩ 11380 11180 10330	3.9 3.5 3.5 3.7 3.8 3.4 3.7	464 620 426 419 432 400 385 417 383	1 1 2 3 3 2 1 1	5840 14370 9815 12770 12537 12235 11070 11550 11790	296 509 388 464 454 439 397 448	3 3 2 2 1 1	10050 9578 12960 12301 11074 11401 11870	422 3/3 454 452 419 419 460
784291	1	1	12450	3.8	468	1950	1	12450	3.8	468						
785376	94	230	11366	3.5	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	7 17 17 39 36 34 27 19 10 8 5	8953 11040 11507 11417 10973 10579 11661 12107 11702 11418 12806 12963 15233 16080	3.6 3.7 3.5 3.6 3.5 3.5 3.4 3.4 3.4 3.6	321 405 415 402 380 409 410 402 386 427 417 514 573	1 5 10 10 13 22 27 17 8 8 4 4 3 3 4 1	7240 11010 11663 11208 11976 11689 12126 11604 11876 12590 10997 13700 14910	308 425 429 399 424 413 433 408 418 460 389 497 581	22 15 7 3 2 4	11545 11772 11745 12605 12313 11865 13691 14955	416 422 423 425 428 421 495 566
785728	5	8	11994	3.4	407	1947 1951 1952 1953 1954	4 1 1 1	11585 13940 14490 12510 13580	3.4 4.0 3.6 3.2 3.4	390 560 520 404 465	1 1 1	12750 12610 12320 12010	427 384 378 399	1	10584 10726	358 350
785828	1	2	11280	3.3	371	1947 1948	1	11040 11520	3.3 3.3	360 381						
786366	164	428	12 362	3.5	429	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	13 29 42 63 61 60 51 34 29 26	12495 12227 12429 12374 12318 12555 12882 12332 11774 11992 13192 16260	3.6 3.5 3.5 3.5 3.5 3.5 3.6 3.6 3.5 3.5 3.5 3.5 3.5	451 430 438 433 434 438 441 427 402 417 438 570	1 7 22 39 58 58 49 33 29 18	10410 12143 12218 12459 12459 11851 12413 12376 12178 12351 12251	360 437 425 444 437 414 438 428 424 443 432	45 47 48 31 27 16	11922 11838 11737 12343 12071 11530 12382	429 425 417 430 424 424 437
787141	1	2	11590	3.4	395	1952 1954	1	10700 12480	3.5 3.3	380 410	1	15610	477			
7873∠3	1	1	11240	3.2	364	1950	1	11240	3.2	364						
787641	13	36	10188	3.7	370	1947 1948 1949 1950 1951 1952	21 6 5 1 1	10168 10940 11128 11830 13630 11740 12190	3.8 3.8 3.8 3.5 3.4 3.7	380 416 424 448 478 405 449	1 1 1 1 1	11420 10710 17010 10210 13040 13430	397 413 588 340 439 462	1	12491	438
787642	13	28	11454	3.5	407	1947 1948 1949 1950	6 2	11341 10813 11850 15325	3.1	378 372 438 590						

TABLE 15.--DAUGHTER-AVERAGE OF STRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

OAUGHTER AVERAGE BY SIRE

											405 DAY	CONTEN	A	WI. ADI W. CO	00 111	0.4.0.0
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.	LB.	TEST PCT.		SOS-DAY RECORDS		FAT	YEARLY HE RECORDS NO.		FAT
						1951 1952 1953	HOLS 2 2 I	TEIN 9975 10885 10320	3.5 3.2 3.3	347 348 342	1 2 1	10360 9615 11880	368 355 396	1	9974	378
79012	5 23	60	10856	3.6	384	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	4 11 10 8 8 0 4 3 3 1	10670 10928 10954 11380 11856 11447 11775 10943 9817 8860 13405	3.1 3.6 3.5 3.5 3.4 3.5	369 395 397 401 409 392 403 387 328 305 505	1 4 6 2 3	14200 14690 11755 12478 12260 13390 11847 14560 9400	493 490 411 448 439 480 397 489 327	Ł	12186 12492 11086 10671 9461 9287	442
79033	7 1	2	17380	3.6	622	1954 1955	1	16960 17800	3.4 3.7	583 660	1	15190 15320	528 542	1	11979 12350	425 436
79829	1 1	4	13193	3.6	480	1952 1953 1954 1955	1	14500 14690 9650 13930	3.9 3.7 3.5 3.5	559 549 317 494	1 1 1	13730 14190 11450 10730	499 478 412 375	1 1 1	14235 11936 11227	
79884	6 57	166	12582	3.5	4 3B	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 8 13 20 24 26 25 18 14 8 3	13450 13163 13020 12939 12495 12267 12783 11982 13788 15443 14324 15100	3.6 3.5 3.5 3.5 3.4 3.3	493 477 462 454 443 427 431 396 455 464 528 497 510	6	13150 14250 11227 12081 12566 12251 13030 12714 13721 13638 11267 14497 13100	462 482 380 418 434 420 448 437 473 473 473 412 509	18 15 12 6 3 2	11959 11858 13879 13905 13923 11593 14017	416 409 487 482 491 411
80024	5 1	2	9640	3.5	337	1956 1957	1	10020 9260	3.4 3.6	339 334	1 1	10160 13400	355 492	1	12110	428
80073	8 104	277	11968	3.5	415	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	9 29 42 54 39 36 30 18 12 7	11066 12435 11842 11945 12316 12228 12563 12136 11778 13280 4820	3.6 3.5 3.5 3.4 3.4	404 442 416 413 419 417 430 410 396 451		8360 12874 11681 12196 12573 12009 12601 12582 11796 12017 10790	301 464 409 422 438 419 436 440 401 431 377	27 32 27 15 9 6	12071 12084 12131 13371 11375 11381 11936	424 420 470 387
80085	2 7	28	12946	3.5	453	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	5 2 3 2 3 2 3 4 2 1	11416 11335 12030 12125 12827 11490 14043 14803 15075 15690 12880	3.7 3.3 3.5 3.1 3.7 3.7 3.3 3.0	396	2 2	9520 9160 12050 12650 11930 12503 13830 14550 12830 12520	447 439 410	3	11739 13273 13255 13974 13974	479
80091	2 2	10	14938	3.0	441	1947 1948 1949 1950 1951 1952	2	12587 16310 16105 11690 17900 12900	2.8	444 335						
80462	0 33	80	12431	3.5	439	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 15 14 11 8 7 6	13370 12872 11685 12511 13343 13193 12430 12552 11440 12345 14160	3.5 3.6 3.6 3.4 3.5 3.3 3.6 3.4	419 445 488 452 433 411 417	6 10 10 8 7 6 3		421 434 412 402 416 442	6 6	12724 11570 12203 12828 12324 12971 12552	411 425 447 440 460
80545	3 18	48	13681	3.3	448	1947 1948 1949 1950 1951 1952	10 5 3	14323 13086 12898 13776 12910 14757	3.3 3.4 3.4 3.3	463 438 431 464 434 491	3 2	14160 11287 11300 12910 13775	444 401 415 444 478			

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRIED,

8Y YEAR OF FRESHEMING--RECORDS FROM THIS STATE ONLY

3.2

3. 1 9232

34.9

DHIO 440

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT LB.	FRESH YEAR	KECORDS NO.	L8.		FAT LB.	305-DAY RECORDS NO.			YEARLY HE RECORDS NO.		FAT
823789	5 12	31	14194	3.6	503	1950 1951 1952 1953 1954 1955 1956 1957	1 5 6 3 4 4 3 3 3	12770 14680 13580 15597 13173 15790 15290 14623 13330	3.8 3.5 3.8 3.6 3.6 3.5 3.7	481 503 517 566 471 515 554 516 485	1 2 4 3 4 4 3 1	12220 13055 13788 14077 11288 13023 13960 11987 13470	447 446 484 476 391 436 469 419 463	3 4 4 3 3 1	12688 11546 10775 13512 12161 14039	439 402 365 460 417 492
82766.	3 38	92	11896	3.5	415	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	6 15 16 12 8 7 9 5 3 7 2 2	10920 11773 11703 11798 12478 12864 11436 14740 12027 12059 12185 13455	3.7 3.5 3.6 3.5 3.5 3.3 3.0 3.6 3.7 3.5 3.3	401 406 413 406 430 432 419 531 446 424 395 409	1 2 4 5 4 5 9 5 3 7 1	14360 11285 10768 11226 11968 12874 13312 13518 12520 11523 10870 16060	424 440 414 409 408 431 461 449 432 397 354 552	4 6 3 1 7 2 2	11778 11752 12048 17168 13068 12072 13107	416 407 423 637 443 410 437
82922	0 1	6	12277	3.9	476	1952 1953 1954 1955 1956 1957	1 1 1 1	12260 10510 12090 13770 12040 13110	3.8 4.0 4.0 3.9 3.8	462 394 485 552 468 495	1 1 1 1	10570 11320 13970 12490 11470 11420	352 420 487 432 412 417	1 1 1 1	10900 12600 11347 11118 10388	392 443 389 399 380
82960	7 4	В	11748	3.6	417	1948 1949 1950 1951 1953 1955	3 1 1 1 1	11027 13250 12940 15500 15650 12650	3.6 3.0 3.5 3.3 3.2 3.4	401 396 452 509 501 433	 	12410 12630 13300 10770 10920	450 386 415 359 354		10693 11140	359 403
82973	2 1	1	8460	3.9	334	1951	1	8460	3.9	334						
83240	7 1	1	9240	3.3	307	1953	1	9240	3.3	307						
83275	4 1	1	9960	3.1	310	1951	1	9980	3.1	310						
83411	9 1	3	11133	3.5	386	1954 1956 1957	1 1 1	10050 12420 10930	3.8 3.4 3.3	381 418 360	1 1 1	11910 14560 10930	432 464 390	1	13680 12110	499 428
83626	0 222	528	12364	3.5	428	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	13 43 81 92 75 66 52 45 27 31	12704 12562 12501 12464 12453 11973 12500 12290 12765 14112 13867	3.6 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	459 439 436 433 419 416 432 428 436 487 524	4 61 81 75 64 49 40 21 31	140.33 11949 12666 12582 124.26 12658 12568 12568 12780 12774 12900 12283	481 425 445 4430 438 445 450 440 449	62 63 59 45 37 17 24	12254 12371 12604 12816 12273 12696 12590 12949	437 440 454 445 441 463
83679	6 I	1	11080	3.3	360	1951	1	11080	3.3	360						
83714	9 109	327	11742	3.6	42 2	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	8 23 49 60 54 35 29 31 27 9	12041 11794 11645 11727 11774 12064 12216 12241 12300 12473 9105	3.6 3.6 3.6 3.5 3.5	445 441 427 429 425 429 439 426 435 436 303	2 6 26 38 46 31 27 30 26	13150 11078 11615 12631 11930 11935 12290 12000 11926 11770 9930	418 425 418		11610 11637 12283 12064 12766 11949 9418	428 421 454 417
84176	6 48	110	12011	3.4	410	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 8 20 19 16 12 7 8 9	12080 11563 13445 12422 12385 11249 11741 12304 13358 13810 11765	3.4 3.5 3.5 3.4 3.3 3.3 3.3	439 408 454 437 432 394 397 404 442 442 380	6 16	14200 13673 12868 12433 12858 12753 12720 12947 13143 12673 13310	455 447 449 455 449 461 456		12403 12853 12923 12488 12957 11927 12232 13427	
84412	2 6	9	12593	3.7	460	1956 1957 1958 1959	2 1 2 4	11990 13540 12790 13028	3.5 3.9	459 481 493 459	2 1 2 4	11555 12540 13155 13110	513	2 1 1 4	12846 12829 12546 13181	407
84526	7 1	2	BB95	3.2	286	1951 1955	1	9170	3.1 3.3	284 28 7	1	12590 10480		,	10802	3/2
84596	8 1	3	10603	3.8	402	1952		11370				10400	240		10002	317

0H10

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORDANIZATIONS--GROUPED BY BRIED, BY YEAR OF FRESHEWING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

STRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	REGURDS NO.		TEST PCT.	FAT L8.	305-DAY RECORUS HO∙	MILK		YEARLY H RECOROS NO.		FAI
						1953 1954	HOLS:	TE1N 11450 8990	3.7 3.5	424 313	1	13430	580			
84697) 14	33	11735	3.5	410	1955 1956 1957 1958 1959	3 6 11 7 6	10427 12005 11445 11283 12552	3.8 3.7 3.5 3.5 3.4	393 435 404 398 432	3 6 11 5 6	13747 13778 12735 13432 13050	497 510 442 472 476	3 5 11 5 6	13127 14327 12264 12511 13254	403 520 439 455 481
84750	5 195	410	11529	3.6	418	1952 1953 1954 1955 1956 1957 1956 1959 1960	12 58 74 02 65 50 37 26	11156 11345 11591 11428 12333 12193 12445 12464 12903	3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	401 417 419 415 437 433 442 440 497	12 50 73 81 62 43 27 20 5	117 14 126 69 12148 12139 12344 12253 123 68 12699 135 36	412 427 423 429 438 441 457 460 510	36 58 69 56 39 24 22	11703 11825 12123 12176 12211 12397 12660 14933	418 422 430 436 442 449 461 523
85029	3 14	27	13368	3.7	480	1954 1955 1956 1957 1958 1959 1960	2 7 4 3 4	11155 12130 12956 14435 11810 12508 13160	3.7 3.7 3.5 3.6	427 454 477 503 423 453 443	2 5 6 3 2 4 2	12570 13510 13987 15753 12885 12435 13615	446 476 494 541 442 431 480	2 6 3 2 3	12290 12335 13346 12720 11124 12495	444 451 475 478 385 435
85046	5	14	12789	3.3	428	1950 1951 1952 1953 1954 1955 1956	2 2 2 2 2 1 2	17055 16100 12485 10240 9835 12090 14095 15320	3.2	543 522 449 334 372 401 409 567	1 1 2 2 1 2	6410 15710 8540 11860 10935 10730 12165 13990	335 459 310 394 370 383 409 489	1 1 1 2	10006 10584 12829 12933 13930	304 389 446 431 467
05099	8 29	72	11965	3.6	421	1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	10 13 12 9 7 8 3 4 3 2	11584 11138 11279 12547 12053 12216 15430 15498 11547 16025 16450	3.6 3.6 3.5 3.5 3.7 3.7 3.3 3.2 3.6	413 400 419 434 415 435 537 561 585 508 595	1 4 6 6 7 3 3 2 1	10/10 12155 11a/73 129//3 12710 12094 14167 13257 13095 16760 11710	385 462 429 438 432 420 487 461 466 570 433	4 7 3 3 2 1	12271 11655 13600 13029 12508 16939 16867	
85272	o 166	430	12521	3.5	435	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	4 52 75 86 75 55 41 26 10	12503 12085 12037 11978 13289 12700 12722 13294 13060 12815	3.6 3.5 3.5 3.5 3.5 3.4 3.4 3.5	453 429 425 424 461 430 426 448 457 438	1 36 70 81 69 51 39 19 14 2	10780 11821 11603 11603 12406 12102 12144 12009 12474 11760	372 426 413 415 434 433 439 434 464	51 67 54 50 39 18 7	11789 31216 12251 12389 12032 12431 13497 12252	421 405 439 439 432 446 503 439
85625	9 1	В	15228	3.6	555	1951 1952 1953 1954 1955 1956 1957	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	16930 17270 17560 14750 13740 13540 13910 14120	3.6 3.6 3.0 3.4	645 601 636 534 496 512 478 537	1 1 1 1 1	17050 12760 14780 13180 13800 15490 14400	546 523 550 452 493 579 552	1	13810 13734 13287 14519	494 505 484 546
85666	1 933	2283	13052	3.5	450	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	1 33 141 319 374 393 341 284 212 158	16060 13292 13341 13268 13283 13063 12815 13026 13170 13713 14058	3.8 3.5 3.5 3.4 3.5 3.5 3.4 3.5 3.5 3.5	607 457 460 457 455 451 440 452 455 480 480	21 107 293 348 375 320 259 151 148 26	12439 11866 11779 11991 12156 12123 12214 12554 12592 12694	432 422 415 422 429 434 440 453 459 471	237 300 314 294 245 126 124	11775 11857 12317 12238 12246 12489 12965 13136	419 419 433 433 438 449 470 473
85734	6 161	300	11371	3.9	438	1955 1956 1957 1958 1959 1960	44 81 71 64 38 2	11825 10978 11582 11835 12635 10545	3.9 3.6 3.6 3.8 3.9 3.9	461 421 443 450 493 406	43 79 67 45 37 2	12724 12403 12658 12492 12892 11100	453 442 458 454 465 393	33 73 62 37 31	12141 12418 12257 12302 13335 13876	435 442 446 450 484 458
86310		1	9810	3.8	376	1959	1	9810	3.8	376	1	125 30	453	1	11282	433
8 6 328	7 3	11	13101	3.6	471	1951 1953 1954 1955 1956 1957	3 2	15070 13100 16310 13150 11540 14340 13320	3.5 3.6 3.7 3.6 3.7 3.6 3.5	522 476 611 473 422 520 469	1 1 3 2 1	13470 11530 13050 11863 11215 10930 11470	468 402 458 407 405 399 411	1 1 3 2 1	12219 13669 11659 10279 12339 13974	433 485 417 390 410 474

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

UAUGHTER AVERAGE BY SIRE

SIKE NU.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	KECURDS NO.		TEST PCT.	FAT LG.	305-0AY 6 RECORDS NO.			YEARLY H		FAI
						1959	HOLS 1	151N 13080	3.6	473	1	14140	497			
863710	0 189	433	11761	3.5	409	1952 1953 1954 1955 1956 1957 1958 1959	11 52 76 82 79 61 40 23	12677 11619 12090 12160 12242 12169 12601 12556 13325	3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	441 397 415 425 419 421 443 434 479	9 47 74 79 71 55 24 26	12732 12540 12360 12587 12632 12932 12660 12835 13253	434 435 424 439 448 464 452 464 464	36 60 67 71 32 21 23	11962 11922 12150 12595 12971 12096 12883 15118	418 416 4,6 440 461 445 470 560
864811	8 8	20	12186	3.7	450	1952 1954 1955 1956 1957 1958 1959	2 2 4 4 4 3	12595 13280 11870 11558 9698 12013 12640	3.5 3.8 3.8 3.6 4.0 3.6	436 496 453 438 347 482 461	2 4 4 2 1	12235 12275 12243 12078 12300 11770	435 441 437 443 426 440	2 4 4 1 1	12290 12821 12587 12492 11718 11358	444 464 461 454 469 400
86532	3 47	58	12109	3.7	452	1956 1957 1958 1959 1960	3 8 14 29 4	11743 12445 12664 12111 11110	3.4 3.6 3.6 3.8 5.6	403 445 482 461 377	5 8 5 28 4	12463 11904 12755 12713 12950	437 428 458 451 452	2 8 8 23 1	13658 12335 11902 13047 13015	480 449 431 465 456
86532	5 (15	13188	3.5	465	1954 1955 1956 1957 1960	4 4 4 2 1	12033 13046 11735 10860 15020	3.5 3.4 3.5 3.5 3.5	416 447 410 387 564	4 4 2 1	12118 12468 12460 13450 12480	439 439 433 468 433	3 4 4 2	11653 12781 12794 12715	416 451 455 455
8600 u	3 1	1	7460	4.2	315	1950	1	7460	4.2	315						
86617	8 252	ц95	12438	3.6	448	1953 1954 1955 1956 1957 1958 1959	1 47 117 125 91 57 55	12810 13197 12865 12106 12409 12512 12276 10590	3.6 3.5 3.6 3.7 3.7 3.6 3.6	404 401 464 436 455 462 442 375	108 108 121 85 39 50 2	11630 12323 12978 12524 12926 13046 12681 12950	414 425 460 448 463 469 462 484	39 89 102 79 35 47	12186 12867 12418 12725 12667 12641 13527	422 457 441 458 462 462 518
d670s	0 9	11	14060	3.4	477	1953 1954 1955 1959 1960	3 1 1 1	15053 12420 13490 14710 16460	3.3 3.4 3.1 3.1 3.5	496 417 503 539 584	3 5 1 1	15630 13658 14250 15690	493 464 506 431	3 5 1	14802 14990 13102 14661	494 495 450 520
86703	5 18	26	11491	3.6	407	1954 1955 1956 1957 1958 1959	11 4 2 2 2 4 1	11664 12050 11320 13470 12720 12445 9740	3.4	410 399 439 446 418 445 560	1 1 4 2 2 1 4	13129 13410 11845 11490 10330 13738 10510	435 472 438 407 384 497 428	10 4 2 2 1 3	13515 12290 12600 12732 10388 12066	448 420 444 448 374 447
86/13	5 2	2	11955	3.7	438	1954 1959	1	8830 15080		30a	1	10000	36∠	1	10431	3/3
86795	4 21	51	12538	3.4	421	1951 1952 1953 1954 1955 1956 1957	1 12 11 9 6 9 2	12870 13469 10925 11679 11807 11676 12640 12290	3.3 3.1	432 454 575 389 408 387 392 439	9 11 9 6 9 2	13551 12121 12474 12688 12070 13165 9660	481 423 433 427 425 448 369	8 8 5 9 2	12461 12152 11992 11862 11827 11543	443 429 431 423 410 437
d6994	6 340	653	12726	3.6	457	1953 1954 1955 1956 1957 1958 1959	1 50 101 132 125 117 103 18	9770 12396 13284 12596 12793 13280 13206 14449	3.0 3.0 3.6 3.6	359 442 475 453 459 478 477 527	1 52 98 128 116 79 99	10520 12613 12993 12622 12537 12771 12745 12101	442 456 449 445 464	1 43 78 112 102 69 80 3	11183 12635 12745 12469 12586 12817 13146 12757	375 446 447 442 450 463 475 467
67024	0 1	2	11215	5.5	369	1957 1958	1	10260 12170		313 425	!	11430 12530		1	124 <i>37</i> 12 <i>33</i> 2	45±
87073	6 9	11	10113	3.4	340	1955 1956 1957 1958 1959	2 1 3 4	7510 11680 10870 8713	3.9 3.2 3.3 3.9	296 379 364 339 365	ź	12230 11770 11420 11420		2 1 2	11364	401 412 401
67112	1 2	5	12379	3.9	471	1951 1953 1954		10130 12285 10400	4.0	385 482 392	1	10675 12580 12030	445		10311 13244	355 483
87242	2 509	1082	12374	3.4	424	1952 1953 1954 1955	68 173 230	11844 12768 12834 12515	3.5 3.4	407 440 443 432	63 167	11433 12601 12604 12536	448 442	41 135 165	12213 12360 12474	441

0H10 443

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

	DAUGHTER				KD2 FK		STATE ON		3Y 51R	E BY	FRESHENING	YEAR				
SIRE I	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-0AY RECORDS NO.			YEARLY H RECORDS NO.		FAT
						1956 1957 1958 1959 1960	HOLS 2 15 143 117 109 19		3.4 3.5 3.5 3.4 3.3	423 419 435 429 414	202 125 99 101 18	12279 12185 12379 12315 11988	433 433 445 447 430		12722 12303 12229 12314 11868	453 440 437 443 431
87 91 53	298	811	13209	3.4	445	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 8 25 49 68 97 126 125 94 75 63 37 39 3	19795 12549 13090 13355 13061 13312 13167 13256 13745 13467 13451 134835 13994 17340	3.2 3.4 3.4 3.4 3.3 3.3 3.3 3.3 3.3	627 431 445 448 447 444 459 445 448 470 562		11345 12947 12752 12503 12415 12512 12312 12221 12036 12011 12540 13893	384 473 460 439 440 439 431 429 430 428 447	8 1 105 87 64 56 26 32 2	12256 12536 11994 12575 12092 11949 12116 12546	
880210	18	29	12233	3.6	441	1952 1954 1955 1956 1957 1958 1959	1 2 6 7 2 2 7 2	11800 11210 10670 11887 11100 9485 13167 12195	4.0 3.7 3.4 3.4 3.7 3.4 3.8 3.8	471 419 307 402 404 312 496 400	2 5 1 1 7 2	11950 12120 11202 12880 12320 14117 12790	411 402 385 447 445 508	2 4 5 1 1 7	12045 11770 12034 12960 10998 13174	420 394 414 440 397 476
680/23	2	6	10127	4.2	428	1954 1955 1956 1957 1958 1959	1 1 1 1 1	8860 11430 9800 10920 15250 9570	3.9 4.3 4.6 4.7 4.4	346 491 451 509 666 433	1 1 1 1	10900 11970 12790 8760 11710 10990	402 428 474 316 411 428	1	9145	35 I 37 3
886218	2	4	11044	3.7	405	1955 1957 1959	2 1 1	11135 12000 11490	3.6 4.1 3.8	403 488 432	2 1 1	11780 11550 13290	421 415 481	2	12077 12829	412 457
886089	1	3	11727	6 • دُ	418	1955 1956 1957	1	12730 13190 9260	3.3 3.7 3.8	418 487 350	1 1 1	11070 12500 9080	401 471 335	1	9483	353
883549	79	161	12006	3.5	410	1953 1954 1955 1956 1957 1958 1959	4 23 49 34 20 18 0	11713 12047 12182 12060 11753 12195 12467 14590	3.5	412 414 422 414 412 422 441 478	23 47 33 22 11 6	13435 12270 12651 11998 12662 12451 13148 17040	456 420 449 430 449 443 483 566	3 17 39 31 25 7 3	13708 12358 11778 12087 12433 12012 13592 14573	417 423
b90181	14	17	11700	4.0	467	1957 1958 1959	2 6 9	13070 11382 12132	3. / 4. 1 4. 1	474 462 490	2 5 9	13810 12288 12476	487 458 450	1 5 6	11816 12297 12235	398 452 449
890281	124	285	12286	3.6	435	1952 1953 1954 1955 1956 1957 1958 1959 1960	8 30 53 50 41 35 35 24 3	11768 12758 13099 13026 11710 13350 12125 11603 11647		402 445 472 463 420 476 421 408 415	5 35 51 50 39 33 28 24	11816 11992 13311 12496 12202 12270 11928 11948 12267	401 422 470 443 428 439 426 426	17 39 45 36 31 24 21	12382 12904 12264 12616 12728 12176 12060	437 449 452 439
890463	13	26	11367	3.6	405	1954 1955 1956 1957 1958 1959	4 6 3 5 5 5	9930 10875 11080 10742 10312 13863	3.5 3.3 3.6 3.8	328 380 374 382 389 463	4 6 3 3 3 3	10665 11903 10463 11222 12207 13163	359 403 457	4 6 2 5 2 3	11737 12557 10312 11534 11423 14951	442 366 410 399
893840	58	134	11626	3.5	403	1952 1953 1954 1955 1956 1957 1958 1959	1 11 28 35 23 19 13 3	12040 11437 11631 11813 12441 11617 11648 11747	3.4 3.5 3.5 3.5 3.5 3.5	413 395 409 409 440 400 389 405 487	1 11 28 34 22 10 8 3	11840 11943 12313 11881 12160 11811 10973 12117 15000		9 26 29 21 16 8	12167 12101 12007 11911 11768 11365 12208	406 428 418 427 424
894515	6	9	11858	3.5	405	1949 1950 1954 1955 1956 1957	1 1 2 1 2	12840 7980 12060 11190 8185 11780	3.2 3.2 4.3 3.8	423 256 386 479 310 400	1 2 1	12650 11015 11560	451 404 382	1	13636 9058	

OH10 4

TABLE 15.--- OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDIN URGANIZATIONS--GROUPED BY BREED. BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	84 21	RE		к	ECORU AVE	RAGE 3	EY SIR	E 8Y	FKLSHENING	YčAk				
SIRL NO.	UAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT	305-DAY I RECORDS NO.			YEARLY HE RECORUS NO.		FAT
						1960	HOLS1	16950	3.4	570	1	12630	473			
895906	ı	6	14272	3.5	492	1953 1954 1955 1956 1957 1958	1 1 1 1	16660 13640 11930 13670 14400 15330	3.6 3.5 3.6 3.5 3.4 3.1	008 470 426 479 490 468	1	14700 11950 8810 12220 13570 11910	479 391 299 445 484 452	1	12329 11216	4 37 3 6 5
895711	159	256	12249	3.6	442	1955 1956 1957 1958 1959	6 67 57 53 8	11213 12150 12564 12422 13077 12934	3.6 3.6 3.6 3.6 3.6 3.6	400 438 453 450 468 457	6 61 62 36 52	13317 12244 12757 12805 12887 13236	460 442 460 456 472 493	5 48 50 32 44	11545 12211 12756 12568 13074	412 436 459 454 479
696.i04	. 1	4	12030	3.9	471	1950 1951 1952 1953	1 1 1	12330 12590 11180 12020	3.0 4.1 4.1 3.9	441 514 463 466						
90∪∠ /4	. 12	16	11084	3.7	403	1957 1958 1959	7 3 4	9867 11810 13265	3.7 3.6 3.5	369 431 468	/ 3 4	12373 13063 12685	439 469 451	6 3 4	12225 12161 13328	448 430 490
900542	1	. 1	10020	3.2	321	1959	1	10020	3.2	321	1	10200	374	1	13505	487
900882		1	14140	3. I	443	1951	1	14140	3.1	443						
901114	1	5	13732	3.9	533	1954 1955 1956 1957 1958	1 1 1 1	15760 11220 15270 12540 13870	3.6 3.8 4.2 3.8	600 421 587 530 526	 	8520 8700 10260 10490 11430	348 302 397 432 388	1 1	9592 9014 8535	392 329 351
903887	1	1	13370	3.5	464	1959	1	13370	3.5	464	1	12000	501	1	13745	536
904220) 28	54	12764	3.6	456	1955 1956 1957 1958 1959	6 10 11 11	12180 12585 11501 13619 13711	3.5 3.0 3.7 3.8 3.6	451 452 422 509 491	6 10 11 8 16	12778 12027 12525 13661 13352	468 428 448 476 470	5 10 9 8 16	11495 11991 12087 13049 13699	420 439 437 466 489
904581	1	1	12340	3.3	409	1956	1	12340	3.3	409	1	12760	422			
905343	; ц	4	11863	3.6	423	1953 1954 1955	1 2 1	12730 10540 13640	3.3 3.9 3.4	426 403 458	1 2	16520 14525	525 499	1 2 1	16633 15227 11843	544 515 427
905788	3 1	1	10120	3.3	336	1959	1	10120	3.3	336	1	10050	350	1	13887	476
905445	126	317	13371	3.4	455	1952 1953 1954 1955 1956 1957 1958 1959	10 64 64 59 57 28 20 15	15350 13850 13150 13589 13554 13127 13433 13595	3.4 3.5 3.4 3.5 3.5 3.3 3.4	515 480 450 466 429 455 445	6 62 64 59 57 28 12 14	14/22 12838 13187 12976 12741 12003 12718 11405	531 458 464 459 448 431 459 408	47 56 57 47 27 12 12	12595 13145 13171 13161 12599 12788 11744	457 475 468 472 453 469 416
906000	33	57	12246	3.7	460	1954 1955 1956 1957 1958 1959	3 7 16 10 14 3	15563 14295 12823 12919 12924 12111 12860	3.7 3.6 3.6 3.7 3.7 3.7 3.9	579 535 462 479 478 456 494	3 4 7 15 9 14 3	13543 14948 13931 13735 12249 11247 11573	470 514 478 489 453 408 436	1 3 7 14 8	15587 15045 14259 14131 12731 11386	577 541 493 499 476 426
906729) 17	43	11871	5. 4	402	1949 1950 1951 1952 1953 1954 1955 1956	3 3 7 8 7 6 4 4	12853 14500 12583 11691 12167 11017 12126 955c 12720	3.5 3.2 3.5 3.5 3.4 3.4 3.2 3.3	450 472 440 404 415 375 391 315 423	1 3 6 6 4 3	15290 13580 12172 10767 12593 11177	550 486 443 400 437 401 427	2 4 4 4	12966 11309 11949 11197 11009	458 422 417 412 400
906/10) 1	1	13970	3.6	499	1957	1	13970	3.6	449	1	14940	55ช	1	12960	477
907873	3 119	267	11683	3.4	399	1953 1954 1955 1956 1957 1958 1959	52 59 41 45 32 20 10 2	11720 11415 12352 12224 12036 12734 12926 15100		396 393 419 418 417 442 451 519	50 54 42 41 27 13 9	12346 11776 12470 12139 12424 13164 12802 13710	436 417 438 427 448 463 466 446	37 47 40 41 28 12 9	11/18 11893 11958 11971 12351 13342 12800 14573	423 415 428 425 438 471 459 476
908242	2 2	5	13590	3.5	468	1951 1952 1953 1955	2 1 1 1	13415 15780 15100 16000		467 527 300 558	i 	13700 11460 11770 14030	483 428 410 481	1	12217 13614	

TABLE 15.--DAUGHTER-AVLRAGE OF SIRES IN SCRVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

110

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

											305-0AY	CUNIFME	AV	YEARLY H	EPO AVE	PACE
SIRE NO.	NO.	RECOROS NO.	MILK L8.	TEST PCT.		FRESH YEAR	RECORUS NO.	LB.			RECORDS	MILK		RECORDS NO.		FAT
930642	2 2	2	10385	4.5	453	1957 1959	1	6610 14160	4.7	314 591	1	119a0 14z50	439 558	1	11292 13745	420 536
93321	2 2	2	8945	3.8	331	1956	2	8945	3.8	331	2	10585	384	2	9875	388
93569	5 107	231	12051	3.7	441	1953 1954 1955 1956 1957 1958 1959 1960	3 53 54 42 39 22 16 2	12880 12740 12361 11339 11236 12120 12229 13940	3.7 3.7 3.7 3.7 3.7	411 465 403 423 417 446 449	50	10 727 125 13 12363 12562 12454 13274 12578 13610	396 436 435 443 442 471 459 447	38 40	11556 12582 12522 12130 12943 12776 14573	405 444 440 431 458 457 476
93578	3 236	372	11713	3.8	437	1955 1956 1957 1958 1959 1960	19 45 56 89 145 18	12635 11533 11515 11849 11875 12884	3.7 3.7 3.7 3.7 3.8 3.5	472 423 430 437 446 472	49	13282 12782 12630 12750 12219 12441	478 453 448 455 447 449	14 35 46 62 119	12827 12762 12367 12746 12465 12610	471 463 442 454 450 454
93671	6 1	2	11920	3.7	432	1956 1957	! 1	9450 14390	3.0 3.5	363 500	 	9590 10190	34 1 38 3	1	11238 9025	417
94042	4 1	1	11030	3.2	351	1959	1	11030	3.2	351	1	10960	419	1	8668	317
94156°	7 4	10	9410	4.0	363	1953 1954 1955 1956 1958 1960	1 1 2 3 2 1	8990 9180 10605 9643 14510 14660	3.6 3.7 3.9 3.6	350 335 389 368 516 597	1 1 2 3 2	11360 12130 14340 11847 13095 12900	410 393 473 420 478 520	1 1 2 1 2	10213 10301 12028 12971 12546 13538	374 344 431 462 467 491
94180	9 1	2	10390	3.5	365	1953 1954	1	8990 11790	3.5 3.5	312 417	1	10210 11770	326 392			
94329	3 4	6	12608	3=6	45/	1953 1954 1955 1956 1957	2 1 1 1	11655 17466 15770 9920 14880	3.7	399 652 680 383 518	2 1	12210 16770 12250	414 513 436	1 1 1	13429 15729 13298 12001	444 506 449 462
94374	9 4	14	11643	3.8	440	1958 1959	1 3	9770 12267	3.6 3.9	351 470	1 3	11070 11083	384 406	1 2	10235 11266	361 425
94625	0 2	3	9766	4.0	387	1957 1958	2	8475 12890		346 513	2	11695	407	1	12110	428
94909	4 2	6	11408	3.9	453	1954 1955 1956 1957 1958	2 1 1 1	11085 15310 15880 15510 16930	პ.გ 4.5 4.1	432 696 658 624 666	1 1 1	12880 10690 13600 13740	466 401 458 493		11183 12644	
94915	6 1	1	11480	3.7	427	1960	1	11480	3.7	427						
94915	9 19	20	11979	3.5	415	1957 1958 1959 1960	2 7 10 1	10300 11587 12581 10460	3.5 3.5	393 405 432 333	2 5 9 1		508 430 452 434	2 2 8 1	12534	498 436 448 401
95039	0 42	94	13318	3.4	455	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 6 17 14 13 12 12 6 5	12770 10933 14181 13949 13602 12871 13105 10996 13658 14884 15190	3.4 3.5 3.5 3.4 3.3 3.4 3.3	359	1 3 14 14 13 11 12 6 4 5		430	3	13058 12989 12469 12501 11560 11659 12097	390 423
95039	1 16	30	11121	3.4	376	1954 1955 1956 1957 1958 1959	6 9 6 4 3 2	12888 10716 9762 10290 8957 12790	3.5 3.5 3.4 3.4	422 373 346 354 307 448	9 6 4 3	12138	440 429 400 334	6 6 4 3	12601	451 456 376 340
95064	8 1	1	12040	3.4	405	1954	1	12040	3.4	405	1	12430	448			
95070	4 301	508	12669	3.6	451	1955 1956 1957 1958 1959 1960	94 112 120 125	13156 13196 12467 12858 12833 11883	3.5 3.6 3.6 3.6	468 446 456	85 101 91 120	12653 12823 12655 12591 12652 11983	463 456 454 461	28 80 84 77 100 5	12505 12531 12711 12444 12955 12352	449 458
95072	5 472	791	12725	3.6	453	1954 1955 1956 1957 1958 1959	85		3.6 3.6 3.6 3.6 3.6	460 451	82 135 120 126 220	11833 12736 12512 12393 12680 12429 12276	446 444 439 456 453	116 111 118 168	12320 12833 12677 12642 12848 12488	459 452 453
95110	4 1	2	7260	3.3	241	1958 1959	1		3.4 3.2			13200 12390		1	11500	410

447 TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRZED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY DAUGHTER AVERAGE BY SIRL RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVENAGE	01 31	IV.L		,	LCOND AV	LAME I	JI 31N	LDI	F KE SHENTING	ILAK				
SIRE NO.	DAUGHTERS No.	RECUROS NO.		TEST PCT.		FKESH YEAR	KECOROS NO.		TEST PCT.		305-0AY RECORDS NO.	CONTLMP MILK LB.	FAT LB.	YEARLY H KECORDS NO.		FAT
							HOLS	TEIN								
95202	9 3	3	14530	3.5	500	1958 1959	1 2	12050 15770	3.5 3.5	418 550	<u>1</u> 2	11540 14750	423 510	1	13636 14017	45⊋ 501
95242	1 1	I	10890	3.8	410	1959	1	10890	3.8	410						
95260	3 1	3	11377	3.7	421	1954 1955 1956	1 1 1	11970 11780 10380	3.4 3.4 3.9	403 459 401						
95446	1 9	11	10903	3.7	397	1956 1957 1955 1959	1 2 2 6	10770 10640 10300 11047	4.4 4.0 3.9 3.5	474 420 397 385	1 2 2 6	11130 11375 11700 12070	405 428 473 423	1 2 2 4	13462 13108 11424 12546	474 483 456 449
95467	5 1	1	11790	4.0	472	1957	1	11790	4.0	472	1	15490	565	1	12960	477
95493	2 1	1	8890	3.6	319	1953	1	8890	3.6	319						
95549	3 70	100	12158	3.7	453	1955 1956 1957 1958 1959 1960	1 9 18 29 39 4	12320 12583 12569 11741 12420 12490	3.7	401 472 464 438 462 483	1 14 26 31	14860 13310 13090 13105 12922 13178	513 469 465 472 464 477	1 6 11 19 29	15783 14205 13232 12587 13053 15118	525 493 463 454 467 566
95604	7 46	75	13526	3.5	471	1955 1956 1957 1958 1959 1960	13 20 14 20 3	13578 13618 12974 14609 13403 15683	3.5 3.4	469 482 454 496 477 529	5 11 17 12 19 3	13624 13104 13484 13543 12753 12467	488 477 478 472 460 437	5 11 15 8 19	13625 12331 12742 13381 12570 12055	496 452 462 475 450 450
95671	4 1	2	12015	3.5	421	1958 1959	1	12830 11200	3.7 3.2	480 361	1 1	12130 10150	451 388			
95878	2 1	1	12740	3.4	433	1959	1	12740	3.4	433	1	10090	306	1	10431	373
95946	6 I	2	11330	2.9	324	1956 1957	1	11190 11470	3.0 2.7	332 315	1	14630	537	1 1	12579 11271	
96631	1 1	2	13220	3.7	480	1955 1956	1	14270 12170	3.6 3.7	508 4 5 1	1 1	13230 13110	457 447			
¥6636.	2 10	20	12536	3.5	440	1954 1955 1956 1957 1958 1959	1 4 5 4 2 3 1	14110 11533 12446 11730 13230 13067	3.4 3.3 3.1 3.8	497 418 423 389 414 496 323	1 4 1 3	11360 13470 12640 12793 13100 12653 9500	429 481 439 438 497 465 322	1 4 3 4 1 2	11412 11562 12234 12031 11816 11500	436 415 437 421 434 421
96647	1 1	1	12450	3.8	471	1758	1	12450	3.8	471	1	14800	547	1	13429	498
96787	3 21	25	12313	3.5	427	1957 1958 1959 1960	3 7 14 1	11107 13057 12176 14730	3.4 3.4	384 447 420 516	3 7 14 1	12790 11659 12226 12990	451 416 439 522	3 6 13 1	12419 12185 12623 13222	449 436 458 465
96854	4 23	39	11598	3.8	434	1955 1956 1957 1958 1959	4 8 6 7 14	12530 10895 11233 12409 11756	4.0 4.0	472 405 438 499 435	4 6 5 13	13980 12215 12410 13214 12816	494 427 417 463 448	4 8 6 6	13909 12479 12393 12250 13473	481 437 437 446 474
96966	7 34	47	12436	3.7	461	1954 1955 1956 1957 1958 1959 1960	1 6 6 13 16	12980 16950 12118 12568 12597 12356 11480	3.5 3.7 3.0 3.7 3.7	459 460 461	1 6 6 9 16 4	11170 14830 13010 13518 13871 12919 12380	477 505	1 1 4 5 8 16	13440 14573 13407 14305 13808 13054 14366	502 485
96966	9 25	37	12751	3.7	464	1955 1956 1957 1958 1959 1960	3 4 5 16	1536 / 12030 12613 11960 12909 13870	3.6 3.6 3.5 3.7	457 439	3 2 4 15	12930 16307 9560 11775 12037 13878	356 424 447	2 2 1 3 12 2	15195 14590 14028 12532 12755 13587	515 499 491 442 464 508
97271	2 1	2	10155	3.8	388	1957 1958	1	11760 8550	3.8 3.8		1	11240	419	1	11292	420
97513	7 23	38	12255	3.5	425	1955 1956 1957 1958 1959 1960	2 6 9 10 10		3.4 3.5	415 445 427	2 6 9 8 10	12170 12110 12170 13404 13196 10570	429 419 468 473	2 5 8 7 7	11811 12559 11967 12043 14114	423
97568	3 33	42	12502	3.6	45 I	1956	4	12230	3.6	437	4	13263	472	3	13171	470

TABLE 15.--DADGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GRODPED BY BREED,

3.3

3.5 3.7

3.3

3.3

3.4

OHIo

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BRIED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STAIL ONLY

	DAOGHTER	AVERAGL	11c Y8	₹ ∟		R	ECORO AVI	RAGL 0	Y 51k	E BY	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	KECUROS NO.		TEST PCT.	FAI LB.	FRESH YEAR	RECORUS NO.		TEST PCT.		305-DAY I RECUROS NO.			YEARLY HE RECORUS NO.	MILK	
						1958 1959 1960	HOLS1 11 12 2	12106 1237 10310		409 424 358	9 12 2	13033 12978 13205	465 473 505	8 9 1	11734 13276 13222	415 481 485
997481	21	30	11579	3.5	404	1954 1955 1956 1957 1958 1959	1 6 7 12 1	9610 8950 14870 12030 12067 12317 9080	3.8 3.0 3.3 3.0 3.0 3.6 3.6	363 260 486 425 447 437 351	1 2 1 6 3 12	13060 13015 16110 12812 11410 12179 14430	445 454 540 473 422 446 537	1 2 1 6 2	11445 13930 13919 13075 11271 12319	405 464 464 405 444
998262	192	264	12234	3.6	439	1955 1956 1957 1958 1959 1960	16 37 69 113 22	13457 11687 11906 12332 12321 13069	3.4 3.6 3.6 3.6 3.6 3.5	460 417 429 442 442 458	7 16 32 58 107 20	13650 13325 12655 12653 12203 12013	476 470 467 452 446 433	5 11 31 52 91	13165 12596 12538 12408 12466 13365	461 453 453 443 488 488
1000390	10	10	13334	3.8	501	1958 1959	1 9	2045G 12543	4.0 3.7	010 467	9	12652	437	7	12309	432
1001512	14	20	11127	4.0	ւ	1957 1958 1959 1960	5 ο 8 1	11692 10222 9956 13800	3.6 4.2 4.0 3.8	445 437 403 521	5 5 8 1	14790 12030 12091 11120	520 436 428 430	ц ц 6	14037 11878 11690	496 422 418
1001748	316	400	12208	3.8	462	1956 1957 1958 1959 1960	10 61 112 173 44	12901 11530 12553 12034 12525	3.8 3.8 3.8 3.8 3.8	477 438 474 457 481	10 53 81 167 34	13938 12670 13191 12859 11897	517 458 481 470 438	7 42 72 141 15	12678 12883 13165 12900 13135	455 460 477 495 487
1003598	10	20	11987	3.7	436	1955 1956 1957 1958 1959	3 5 1 6 5	10870 11068 10590 12495 12858	3.6 3.7 3.8 3.9 3.5	418 403 401 487 448	3 5 1 4 5	12307 11698 14520 12660 11578	446 427 507 485 420	3 4 1 3 3	11787 12532 12437 11514 12096	456 451 456 428 436
1004232	45	67	13051	3.7	470	1956 1957 1958 1959 1960	1 27 21 5	10455 11963 13553 13136 12833	3.7 3.7 3.7 3.7 5.0	384 441 498 482 493	4 6 23 20 8	11403 12290 12725 12791 12530	390 450 456 461 466	2 5 20 17 4	11794 11580 11730 13073 13511	418 414 424 473 489
1005575	5	6	12657	3.5	433	1958 1959	2 4	13570 11940	3.2 3.6	431 424	2	12350 14428	452 529	2 4	13871 14644	470 535
1000866	318	ել ել ել	12628	3.7	459	1956 1957 1958 1959 1960	30 72 134 177 31	12829 12088 12855 12784 13180	3.7 3.6 3.7 3.6	470 441 468 407 476	30 70 98 174 29	12695 12592 12779 12045 12920	453 451 471 461 473	25 59 85 148 8	12825 12534 12501 12840 11518	453 446 447 471 442
1007357	1	1	10590	4.0	423	1959	1	10590	4.0	428	1	9760	358	1	9690	355
1007680	2	2	12870	3.5	14 14 14	1959 1960		11110 14630	3.5 3.0	367 520	1	12480 13390	417 479	1	12110	417
1006622	! 15	27	13045	3.6	466	1955 1956 1957 1958 1959 1960	2 / / 7 7 2	8665 10960 11104 14306 14403 14330	3.5 3.5 3.4 3.6 3.6	285 381 378 519 524 515	2 2 1 1 1	9715 10850 11351 12433 13544 13680	317 374 399 449 491 517	2 5 7 6	11053 10971 11284 12412 13280 10628	378 379 403 453 487 372
1008924	2	5	11994	4.2	503	1956 1957 1958 1959	2	11700 9180 13490 11320	4.5	577	1	12920 11180 12400 10380	439	1	12110 11968 13505	435
1009405	1	2	9450	3.7	344	1959 1960	1	9000 9900	3.6		1	7390 6700		1	6987	328
1011334	123	200	12863	3.6	462	1955 1956 1957 1958 1959 1960	30 37 65 56	12634 12115 12606 13195 13056 13377	3.6 3.5 3.0 3.6	432 446 471 471	29 39 51 54	11869 12019 11936 12391 12410 15180	427 429 447 447	22 27 44 49	11569 11877 11724 12298 12810 12557	428 424 444 465
1012593	В	9	13636	3.5	475	1958 1959 1960	2	14980 14285 9300	3.7 3.4	541	2	12840 12907 10580	463 466	1	11816	434
4 ا 4 دُ 101	o 514	617	12957	3.6	466	1957 1958 1959 1960	120 404	11885 13207 12869 13860	3.0	470 465	99 397	12566 12845 12475 13196	462 456	77 327	12656 12521 12727 13604	450 478
1013716) 1	3	108.57	4.1	447	1956 1957 1958		9860 1087u 11780	4.2	462	1	16920 14390 13270	511	1	15522 15783 14682	588

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BRELDING ORGANIZATIONS--GROUPLO BY BRILD. BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

DAUGHTER AVERAGE BY SIRE

											40L 0.14	CONTIN		VC 404 11	Lub	.1.4.
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECORUS NO. HOLS	L8.	TEST PCT.	FAT L8.	RECORDS NO.	MILK		YEARLY H RECUROS NO.	MILK	
1014100	0 75	142	11774	3.8	449	1954 1955 1956 1957 1958 1959 1960	9 30 26 21 25 29 2	11681 11893 11660 12335 13281 12181 15195	3.8 3.9 3.8 3.7 3.9 3.8 4.2	448 459 439 457 518 469 630	9 26 23 19 19 29 2	13438 12727 13278 12616 12681 12469 14410	469 445 481 450 431 453 530	9 23 20 16 16 21	14099 12611 14056 12878 13104 12627	501 451 511 457 478 456
1015248	3 1	2	10000	3.8	375	1956 1957	1	9650 10350	3.8 3.7	364 386	1	10280 10540	347 381	1	12110	4∠8
101525	1 79	158	11818	3.5	413	1955 1956 1957 1958 1959	21 40 38 33 24 2	10545 11354 11443 12158 12955 13465	3.6 3.5 3.4 3.5 3.5 3.6	377 398 390 422 452 481	20 36 35 23 21	11616 12060 12166 12783 13589 15300	427 431 435 462 491 465	18 33 31 22 18	11558 11981 11821 12586 13500 11162	420 435 425 456 487 416
101534	B 102	116	13627	3.5	478	1958 1959 1960	24 75 17	13035 13860 13624	3.5 3.5 3.5	458 489 476	17 74 16	13022 12955 12778	457 461 453	14 58 5	12361 13343 14087	415 473 493
101685	2 1	2	12190	3.8	462	1955	2	12190	3.8	462	2	12055	403	2	12208	405
1017532	2 54	63	12784	3.8	476	1958 1959 1960	15 38 10	13351 12936 13062	3.6 3.8 3.8	4/1 486 501	13 37 8	13184 12669 12854	491 464 479	12 31 2	12631 13335 14944	463 487 545
101779	7 96	121	12533	3.6	444	1957 1958 1959 1960	5 կկ 53 19	12786 12270 12678 13129	3.6 3.6 3.6 3.6	463 438 455 465	4 31 51 19	11858 12470 12553 12596	433 45∠ 456 460	4 26 40 8	13285 12220 12963 11921	471 440 479 454
10202 <i>1</i>	7 22	37	1203∠	3.7	442	1955 1956 1957 1958 1959 1960	1 7 9 10 6 4	16340 11851 12787 12635 10117 14448	3.8 3.6 3.1 3.8 3.7 3.9	621 432 474 477 369 563	1 7 7 8 6 3	16070 11933 12514 12846 11137 12397	521 463 436 449 394 463	1 5 7 8 5	14443 12622 13149 12351 12879 13538	500 445 468 432 458 491
102157	1 2	2	9845	3.8	376	1960	2	9845	3. b	376	2	11465	404	1	11412	399
102209	5 1	1	4390	3.7	161	1960	1	4390	3.1	161	ı	4660	188			
102396	7 2	5	13537	3.5	474	1953 1955 1957 1958	2 	13055 11360 12020 12930	3.5 4.1 3.4 3.5	458 471 409 430	1 1 1	13100 12100 10780 8590	479 427 383 349	1	12110 11968	428 435
102445.	3 3	5	12373	3.8	468	1957 1958 1959 1960	1 2 1 1	13270 12500 12790 12660	3.7 3.6 4.1 3.8	489 446 524 486	1 2 1	12490 11015 14200 11510	486 394 568 436	1 2 1	1207 <i>1</i> 12399 14780	455 441 554
102611	5 181	240	12738	5.7	466	1957 1958 1959 1960	32 64 114 30	11848 12948 13037 13124	3.1 3.6 3.1 3.6	437 469 479 470	29 50 110 29	12576 12156 12802 12886	452 443 463 469	25 43 88 13	12610 12396 12970 13519	457 449 473 491
102826	0 5	5	13344	3.4	452	1959 1960	3 2	12380 14790	3.4 3.5	412 513	3 2	13600 16210	465 608	2	14764	5.6
102896	3 115	167	11820	3.9	459	1955 1956 1957 1958 1959 1960	1 13 21 44 80 8	12250 11804 11574 11688 11928 11933	3.0 3.9 3.9 3.4 3.9 3.8	440 463 454 452 464 452	1 13 21 40 78	12980 12610 13152 12462 12345 12241	442 459 472 448 447 443	1 11 16 34 62 4	12393 13152 12633 12533 12996 12484	412 481 455 451 468 458
103040	4 8	8	12620	3.4	427	1959 1960		13037 11370			6 2	12358 9100	448 307	5 2	11962 13075	410 432
103303	2 5	5	13462	٥.6	478	1959 1960	3 2	15863 9860	3.5 3.7	556 362	خ ا	13627 14700	493 517	2	14203	504
103370	8 15	18	11438	3.6	410	1958 1959 1960	خ 11 4	9823 11731 12493	3.5 3.6 5.7	324 422 456	3 11 4	12677 12521 13905	426 451 512	3 9 1	12317 13085 10638	431 469 398
103445	2 1	1	14480	3.7	5 34	1956	1	14480	3.7	5 34	1	11050	468			
103516	4 52	61	14897	3.5	522	1958 1959 1960	11 43 7	15706 14697 15883	3.5	551 517 547	9 43 7	13439 13055 13141	479 478 469	8 36 4	12925 13430 13895	461 492 493
103585	0 1	2	9610	3.8	367	1955 1956	1	10880 8340		424 310	1	10470 11060	366 392	1	12982 10355	
103588	9 146	197	12624	3.6	450	1956 1957 1958 1959 1960	21 36 55 76 9	11397 12022 13253 12972 13057	3.6 3.6 3.6	406 429 477 463 480	20 32 40 74 8	11811 11814 13203 12547 12650	423 421 414 458 463	19 28 39 58 1	11372 11540 12642 12844 13592	418 463
103811	8 I	1	11540	4.9	560	1959	1	11540	4.9	560	1	11910	461	1	10508	422
104 184	2 1	3	10263	3.7	377	1957 1958	ł 1		3.6 3.6	324 345	1	11210 10310	395 391	1 1	12110 11969	

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY ONLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

BAUGHTER AVERAGE BY SIRE

SIKE NO.	DAUGHTERS NO.	RECORUS		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAI LB.	305-DAY RECORUS			YEARLY HE RECORDS NO.	RO AVE MILK L8.	FAT
						1959	H0F2	TÉ1N 12300	3.6	462	1	10340	381	1	13505	487
1 4215	9 69	76	13188	3.6	471	1958 1959 1960	4 57 15	14370 13095 13914	3.4 3.6 3.0	492 468 495	4 56 12	14688 12449 12976	536 458 484		12971 13006 12472	464 476 478
105084	8 17	17	12862	3.7	468	1952 1960	12 5	12455 13838	3.1 3.5	459 490	12	11767 12326	436 469	12 1	12617 14552	455 495
105343	l 59	87	11341	5.6	409	1956 1957 1958 1959 1960	6 12 26 35 5	10453 11008 11481 11744 11576	3.0 3.6 3.6 3.7 3.4	368 400 413 429 390	6 12 20 38 5	12°22 11623 12382 12677 13616	436 412 445 468 488	5 12 17 35 2	13303 11695 11812 12931 12459	456 413 431 472 469
165389	5 1	2	9965	5.3	335	1958 1959	1	12310 7620	3.4 3.2	424 246	1	12180 10390	456 396			
105440	6 44	64	12596	3.7	460	1954 1955 1956 1957 1958 1959 1960	1 0 10 18 21 5	10480 8180 14119 12357 12892 12394 13906	3.7 3.7 3.6 3.5 3.7 3.7	392 299 502 436 474 454 513	1 7 9 17 20 5	11630 10450 14296 13019 13235 13219 11798	409 373 504 468 476 470 454	1 7 8 16 18	10497 13343 12933 12424 13332 14453	376 472 467 443 475 537
105449	6 306	356	12677	3.7	467	1957 1958 1959 1960	9 67 231 47	13881 12781 12792 12005	3.8 3.7 3.7 3.7	520 466 473 444	8 60 219 40	13358 12522 12207 12346	474 450 448 448	7 54 175 12	12725 12578 12720 13005	45 . 44 ? 40 1 46 ?
105548	3 19	25	13744	3.7	512	1955 1956 1957 1958 1959 1960	2 6 7 7 1	12485 13385 13463 11899 15570 13190	3.7	474 486 500 442 568 488	2 2 6 5 7 1	10520 12075 13223 12770 13267 13630	342 485 489 474 482 498	2 1 5 4 5	12524 13320 13420 12799 12788 12949	4:3 501 495 454 451 463
105688	2 179	260	12320	3.6	447	1954 1955 1956 1957 1958 1959	2 9 29 55 61 89 15	16816 14309 12011 12207 12519 12503 11562	3.9 3.0 3.6 3.6 3.7 3.8	044 514 433 445 451 456 437	2 9 26 49 46 81	15580 14031 12535 12314 12748 12562 12622	542 503 457 438 456 453 466	1 5 22 38 32 73 6	15587 15602 13305 12605 12402 12657 13073	559 551 471 452 448 455 483
105773	9 1	2	13590	4.1	552	1958 1959	1	12440 14740	4.1	515 588	1	11390 9400	406 346	1	10366 9690	353 355
106 14 5	8 2	2	11085	3.5	381	1959 1960	1	10110 12060	3.5 3.4	353 408	1	12460 11140	451 409	1	11936 11412	452 399
106189	4 15	25	11441	3.9	440	1956 1957 1958 1959 1960	2 2 13 6 2	11415 11110 12001 10750 11465	4.1 3.7 3.9 3.8 4.0	466 416 404 411 455	2 2 9 6 2	14285 11410 12990 12068 10615	501 389 477 446 421	1 2 4 6	13745 12012 12527 11701	462 417 450 418
106191	1 9	10	12975	3.4	437	1957 1958 1959 1960	1 3 2 4	11850 11107 14210 14965	3.2 3.5 3.6 3.4	380 354 501 510	2 2 4	11655 13375 13935	415 514 510	2 2 1	12802 12426 15118	456 472 566
106285	2 1	1	8990	3.3	294	1956	1	8990	3.3	294	1	9650	323			
107603	6 7	9	13210	3.8	501	1957 1959	4 5	11970 13706	3.9 3.7	473 513	4 5	10065 12556	388 496	4	10410	385
107039	5 18	27	13082	3.7	477	1955 1956 1957 1958 1959 1960	3 7	18230 12363 14260 14106 11979 10630	3.8 4.0 3.6 3.0	750 460 577 510 430 342	3 7	162 10 12580 13970 13204 11898 11280	498	2 3 6	16208 11391 13741 12826 13006	426 501 448
107085	0 1	1	17570	3.5	622	1960	1	17570	3.5	622	1	14130	503			
107383	1 1	2	10155	4-2	417	1959 1960	1	6050 14260	4.2 4.1	253 581	1	13170 14220	507 558	1	13745	536
107486	4 2	2	12550	4.4	554	1959	2	12550	4.4	554	2	12765	468	2	12094	446
108015		2	9670		353	1959	2	9670		353	1	10830	395	1	11881	434
108127	0 13	15	11961	4.1	483	1956 1957 1958 1959 1960	1 1 5 6 2	9860 12220 12182 12118 11335	3.9 4.2 3.9	397 480 511 466 492	1 1 4 6 2	12240 12180 12668 10890 11970	460 395	1 1 4 5 1	8938 11696 11895 11417 13538	429 410
108168	4 13	26	12784	3.6	463	1955	2	13610	3.7	508	2	16505	532	2	16525	573

05:10 452

TABLE 15.--DAUGHTCK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING GRGAVIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE UNLY

	DAUGHTER	AVERAGE	8Y 51				ECORO AV.		Y 51R	E BY	FRESHENING	YĽÁR				
											305-JAY (JONTEMP		YEARLY HE	ERD AVE	KAGE
SIKL NU.	DAUGHTERS Nú.	NO.	MILK LB.	PCT.	FAT LB.	FRESH YEAR	RECORDS NO.				RECURDS		FAT LB.	RLCORUS NO.	MILK LB.	
						1950	HOLS	TEIN 13310	3.5	4/0	5	14842	526	4	14275	512
						1957 1958	7	12151 13185		427 477	7 4	12169 13058	441	6	13044	468 395
						1959	6	12247	3.7	451	6	14210	500	4	13813	477
1084190) 15	15	13045	3.4	446	1959 1960	8 7	13913 12054	3.3	487 399	8	13279 .9960	500 366	6	12938	491
1086776	3	4	12458	3.4	416	1954 1955	1	15220 9750	3.6	554 345	1	11560 12520	400 457	1	10420	370
						1956	2	12445	3	400	2	11220	346	i	15805	536
1087246		1	9730	3.8	372	1959	1	9730	3.8	3/2	1	12020	442	1	12818	468
1087974	16	19	14179	3.6	512	1958 1959 1960	3 15 1	15237 14335 15200	3.7 3.6	540 323 579	15	13745 12119	492 446	1 12	11903 12860	413 470
1088151	10	10	13072	3.7	473	1959	,	13213	3.6	469	7	12131	433	5	12452	439
						1960	3	12743	5.8	483	3	11633	405			
1083767	5	9	14333	3.6	506	1956 1957	3 3	14300 15017	3.4	483 542	2 2	14940 14805	526 50 I	2 2	13843 14585	469 503
						1959 1960	1	13485 13530	3.0	485 428	2	12905 12690	488 529	1	11074 12197	407 445
1088709	14	22	12391	3.6	437	1954 1955	1 5	8840 12830	3.6 3.5	318 447	1	12350 12426	457	1	12513 14035	435 483
						1956 1957	4 5	14315	3.5	494	4	13293 13035	470	4 3	14091	478
						1958 1959	4 3	1445c 12860	3.5 3.5	505 446	3 2	12173 11690	435 426	3 1	12786 12034	449 436
1090000	2	2	11370	3.8	433	1957	1	10910		368	1	16560		,	176.05	b 10 7
1090258	3 191	195	12784	3.7	474	1959	2	11830	3.5	497	2	10360	380 527	2	13505	487
10,0230	, , , , , ,	.,,	12104	3.,	71.7	1959 1960	146 47	12720	3.7 3.7	473	145 40	12986 12928	464	124 16	13001	467 497
1090978	3 1	2	12900	3.1	399	1954 1956	1	12220 13580	3.2 2.9	397 400	1	11610 12890	418 477	1	11478	416
1090980) 1	1	12770	3.3	425	1957	1	12770	3.5	425	1	14010	512			
1092773	3 1	1	10990	3.7	406	1958	1	10990	3.1	406						
1094305	56	58	12938	3.7	483	1959 1960	34 24	12916 12903		481 484	33 16	13018 12960	472 475	29 6	13588 12402	496 456
1094325	5 1	1	16980	3.7	631	1958	1	16980	3.7	631	1	11640	433	1	12535	447
109492	1 25	34	11627	3.7	427	1954 1955	1 2	4640 10810	3.5 3.5	164 383	2	13950	505	1 2	12557 10928	409 400
						1956 1957	1 7	11670		464	1	13440	492 484	6	13500	490
						1958 1959	9	11151 12653	3.8 3.7	424 462	4 11	13643 12842	50 I 463	4 8	13086 12908	483 470
			.750-			1960	3	11893		438	3	12813	472	1	15118	566
1102436		1	13580		526 595	1959	1	13580		526	1	12430	455	1	13505	487 501
1104031	•	•	13700	3.0	373	1957 1958	i	15580 14750	3.5	538	i	11600	444	i	14410	499
						1960	1		3.4	670	1	12120	460			
1105615		1	9650		298	1958	1	9650		298						
1106407	7 1	2	11205	3.5	396	1957 1958	1	12150 10260	3.5 3.5	431 360	1	11180	422	'	11292	420
1106775	5 18	24	12612	3.7	470	1956 1957	· 2	10880 10790	3.5	375 369	2	11565 13260	391 473	2	12595 12949	444 450
						1958 1959	8	12079 12585	3.7	447	5	13398 12727	478 464	5	12742 12831	
						1960	1	14160	3.7	531	1	13550	494	1	12949	463
1108504	+ 1	3	12933	3.0	394	1956 1958	1	13730		430 430	1	12410 13790	417 519	1	11968	435
1111079	5 9	11	11710	3 4	1.07	1959 1957	1	10660		322	1	10410	387	3	13505	487
1111079	, ,	11	11312	3.0	407	1958 1959	3 1 7	10647 5350 12234	3.8	368 203 457	3 7	13439	458 512	3	14677	433 566
1111076	5 16	22	12483	3.6	442	1955	2	11645	3.8	439	2	13375	470	2	11936	412
						1956 1957	1 5	14930 13672	3.3 3.7	491 506	1 3	15860 14667	532 52 I	1 3	17080 14482	547 499
						1958 1959	6	11568 13705	3.5	435 472	3 6	14307	512 480	3 6	13483	498 454
111221	1 2	2	12640	3 7	1180	1960	1	9368 17580	3.5	333 685	3	11317	398	2	13021	455 496
111221		2	12040	2.1	400	1474		11360	2.4	000		11040	130	'	12307	470

OH10

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED.

BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY STE	RE		R	ECORD AV	ERAGE 8	Y SIR	Е ВҮ	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-0AY RECUROS NO.			YEARLY HI RECOROS NO.	MILK	
						1960	HOLS 1	TE1N 7700	3.5	274						
1113278	3 38	51	12356	3.8	463	1956 1957 1958 1959 1960	4 7 17 21 2	13065 13124 12001 12452 13110	3.6 3.7 3.7 3.8 4.0	473 494 447 469 517	i	13535 13379 12743 11731 12940	475 477 461 426 504	4 6 8 19	13167 14236 13180 12229 14355	466 498 467 441 550
1113350	19	19	13206	3.6	474	1959 1960	2 17	16355 12835	3.1 3.7	511 469	2 10	15085 12859	564 473	1 4	13429 13255	431 486
1113559) 1	1	9050	4.0	363	1956	1	9050	4.0	363	1	11620	418	1	11118	399
1116074	3	5	11972	3. 4	409	1955 1956 1957 1958 1959	1 1 1 1	11110 6430 13850 12990 13600	3.2 3.1 3.5 3.4 3.6	354 202 484 435 494	1 1 1 1	8500 8260 10580 13640 12500	275 268 392 476 456	1 1 1 i	8731 8033 11968 12971 13167	284 270 411 460 456
1116198	3 1	24	13055	3.0	387	1955 1956 1957 1958	1 1 1	14770 13180 13150 11120	3.0 3.0 2.9 3.0	440 396 381 329	1 i	15600 12400 14310	520 372 460	1 1 1	14726 14759 14486	473 477 504
1119514	30	40	12610	3.4	430	1956 1957 1958 1959 1960	5 9 6 15 5	15032 12314 12047 13274 11214	3.5 3.5 3.3 3.4 3.5	526 425 392 453 375	5 9 6 14 5	15096 13652 13288 12496 12962	526 497 487 454 466	5 7 4 12	13542 13943 13462 12749	469 486 476 454
1120027	1	1	10850	3.4	364	1959	1	10850	3.4	364	1	10150	357	1	13887	496
1121706	73	74	13112	3.9	511	1958 1959 1960	2 47 25	12200 13474 12504	4.1 3.9 3.8	505 527 479	2 45 22	12370 12638 13224	416 467 470	35 8	12460 13824	449 48 I
1123039	1	1	9240	3.3	305	1957	1	9240	3 • 3	305				1	13571	451
1125395	33	43	12554	3.6	449	1955 1956 1957 1958 1959 1960	1 3 3 20 15	17510 13100 13123 11957 12533 11590	3.2 3.6 3.7 3.6 3.7 2.4	561 463 489 424 459 276	1 3 3 12 15	15830 11840 12573 12416 13669 13410	496 426 438 450 487 396	1 2 2 10 14 1	17484 13587 13282 12100 13117 11129	604 457 491 434 463 344
1126687	118	122	12428	3.7	459	1958 1959 1960	ц 95 23	15525 12503 11645	3.6 3.7 3.8	556 460 438	4 95 20	13755 12622 12358	484 464 453	3 17 3	13908 12769 11783	499 465 425
1127694	1	1	10910	3.4	374	1959	1	10910	3.4	374	1	14620	512	1	11979	443
1128308	3 1	1	6270	4.1	257	1959	1	6270	4.1	257	1	10580	390	1	13505	487
1128315	5 4	10	12173	3.7	449	1954 1955 1956 1957 1958	3 3 2 1 1	12610 13100 13845 11150 8650	3.6 3.6 3.9 3.8 3.5	459 476 535 418 302	3 3 2 1	12270 13090 14930 13250	437 465 557 525	2	11478 10410	416 385
1132120) 1	2	12670	3.2	412	1956 1957	1	13110 12230	3.2 3.2	426 397	1 1	12420 11980	446 381	1	10181 12339	393 410
1132993	3 29	44	12894	3.7	478	1955 1956 1957 1958 1959 1960	1 6 10 7 14 6	13510 11243 13334 14480 13604 11652	3.5 3.8 3.8 3.8 3.7 3.7	468 427 505 555 509 405	1 6 9 5 13 5	13940 13045 13310 13542 13335 11810	486 469 470 478 482 424	5 10 5 11 2	13856 13544 13207 13029 13636	488 476 467 467 465
1139159	> 55	73	12394	3.6	443	1957 1958 1959 1960	6 21 38 8	11292 12772 12931 10793	3.7 3.6 3.6 3.5	412 455 465 377	6 19 36 8	11667 13353 12451 11229	429 464 449 421	17 31 3	13451 13229 12857 12742	464 465 465 454
114273	3	3	14060	3.0	506	1960	3	14060	3.0	506	1	12090	412			
1145480		1	7080	4.1	290	1959	1	7080	4 - 1	290	1	10100	414	1	10846	417
1145788		1	15680	3.8	593	1958	1	15680	3.6	593	1	14820	543	1	14072	521
1149460		1	11400	3.8	436	1960	1	11400	3.8	436	1	13370	543	1	13538	491
115 18 63		3 35	15993	3.7	587 423	1959 1955	3	15993	3.7	587	3	13703	517 455	3	13636	515 449
1153208	5 21	35	11342	3+1	423	1956 1957 1958 1959 1960	2 7 8 11 2	9358 11005 11999 13066 12118 9225	3.6 3.5 3.8 3.6 3.7 4.1	338 386 447 469 451 375	5 1 7 7 11 2	11730 12399 13846 12495 13000	423 443 510 454 481	2 7 7 9 2	12976 10432 13074 12929 12634 11053	369 461 473 452 399
1153740	10	10	11224	3.9	432	1958 1959 1960	4 5 1	12293 10680 9670	3.7 4.0 4.0	450 426 389	2 5 1	14600 11684 10860	524 408 373	2	11211 12421	418 432

OH10 454

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

	DAUGHTER	AVERAGE	8Y S16	RE		RI	ECORD AV	ERAGE B	Y SIR	E 8Y	FRESHENING	YEAR				
SIKE NO.	DAUGHTERS NO.	RECORDS ND.		TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT L8•	305-DAY RECDROS NO.			YEARLY HE RECORDS NO.		
							HOLS	TEIN								
1156059	4	ц	13690	3.6	492	1959 1960	3 1	15830 7270	3.5 3.9	560 287	3 1	14250 8260	526 280	3 1	14330 15020	518 519
1157722	10	11	12511	3.6	450	1957 1958 1959 1960	2 2 5 2	11405 13540 13580 10900	4.0 3.5 3.6 3.6	437 469 488 392	2 2 5 1	11760 14095 13242 11980	445 501 486 401	2 2 4	12148 13467 13743	448 484 510
11640 14	2	2	16185	3.8	623	1958 1959	1 1	15310 17060	3.5 4.1	542 704	1	13930	491	1	13603	461
1164018	3 7	8	14509	3.8	547	1958 1959 1960	2 5 1	12690 14386 16330	4.0 3.8 3.8	499 541 612	2 5	13145 13392	480 498	1 4	13538 12532	444 469
1170467	17	26	11999	3.8	452	1956 1957 1958 1959 1960	7 6 7 5 1	11884 11525 12429 12200 17740	3.8 3.8 3.8 3.8 3.7	450 436 472 463 659	7 6 6 5	12803 12885 13185 13424 16180	454 463 465 491 575	7 6 6 3 1	13754 12719 12724 12659 14791	487 449 451 460 506
1170910	10	12	13210	3.7	481	1958 1959	1 11	16510 13039	3.2 3.6	521 475	1 10	11670 12802	43 I 460	1 9	13832 12834	495 456
1175466	2	- 2	11765	3.4	394	1958 1959	1 1	13020 10510	3.5 3.2	454 333	1	10640	409	1	12034	431
1175467	7	9	13078	3.9	510	1958 1959	3 6	14050 12330	4.2	584 474	3 6	13730 12222	480 453	2	12617 12012	463 438
1179574	27	33	11954	3.7	448	1957 1958 1959 1960	4 8 16 5	12165 11369 12438 11 7 22	3.8 4.1 3.7 3.8	457 468 460 443	4 6 16 5	13300 12360 12600 12560	471 434 458 439	4 4 16 2	13001 12426 12780 13124	461 426 460 455
1179575	5	7	13222	3.5	462	1957 1958 1959 1960	1 3 2 1	14200 12090 11730 14410	3.7 3.4 3.6 3.1	527 416 427 450	1 1 2 1	12590 11680 12050 11780	492 420 431 404	1 1 2	16339 10824 11587	601 401 403
1182629) 1	1	15920	3.0	474	1960	1	15920	3.0	474	1	14120	483	1	13647	477
1182714	1	2	12400	4.0	495	1956 1957	1	13390 11410	4.0 4.0	533 457	1 1	12520 11650	435 454	1 1	11216 12295	400 432
1184848	6	6	13308	4.0	528	1959	6	13308	4.0	528	6	12773	470	4	12666	446
1188952	2 30	40	14123	3.5	489	1956 1957 1958 1959 1960	1 2 8 27 2	14420 15705 14028 13996 16780	3.6 3.4 3.4 3.5 3.3	517 536 476 490 548	1 2 8 26 2	13580 14315 14129 13431 13510	451 486 493 485 473	1 2 6 23 1	15009 14475 13834 13186 12677	498 484 475 468 471
1189726	2	3	11800	4.0	469	1958 1959	2	11480 12120	4.1 3.8	476 461	1 1	13330 13310	479 501	1	11074 13058	376 463
119015	1 4	14	10845	3.6	389	1959 1960	3 1	12090 7110	3.6 3.6	434 253	3 1	13830 8340	486 297	3 1	12782 15020	432 519
1190396	1	1	8260	3.6	295	1957	1	8260	3.6	295	1	11740	441	1	11292	420
1192779	, 4	4	10680	3.7	380	1957 1959 1960	1 2 1	15890 9070 8690	2.9 3.9 4.0	458 356 351	1 2	16040 10350	5 7 2 365	1 2	14573 11467	492 400
1 1939 31	3	3	105# 7	3.6	367	1958 1959 1960	1 1 1	14470 11740 5550		471 398 231	1	16260 11580	563 414	}	14486 12862	504 426
1194166	5 2	2	12190	4.4	531	1959	2	12190	H * H	531	2	13585	518	2	12993	465
1200288	3 4	4	12260	3.8	442	1959 1960	3 1	12460 11660	3.7 3.9	439 45 I	3 1	13207 10610	452 395	3	12215	413
1203114	1	1	13590	3.4	461	1958	1	13590	3.4	461	1	13590	46 I			
1210614	3	3	13177	3.4	440	1958 1959	1 2	16970 11280	3.1 3.5	521 399	1 2	15090 12065	567 458	1	14552 14453	524 519
1216908	з г	1	10060	3 • 1	310	1960	1	10060	3.1	310	1	11170	346	1	11129	344
1216909	5	5	14528	3.6	528	1959	5	14528	3.6	528	5	12112	447	5	12816	476
121695	7 9	11	11218	4.0	451	1958 1959 1960	2 7 2	9820 11551 9355	4 • 1 4 • 1 /3 • 7	398 469 342	1 7 2	11840 12386 10455	413 452 368	7	12124	428
121829	3 4	5	13598	3.5	467	1959	5	13530	3.4	464	14	12 135	434	ц	14053	509
122176	1 71	77	12766	3.8	483	1958 1959 1960	14 52 11	12161 12857 12850		458 483 492	12 51 11	12526 12139 11445	449 440 429	10 43 6	12312 12396 11062	440 442 410

OH10 455

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPLO BY BREED. BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRL RECORD AVERAGE BY SIRE BY FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERD AVERAGE RECORDS MILK FAT RECORDS MILK FAT NO. LB. LB. LB. LB. SIRE VAUGHTERS RECUROS MILK TEST FAT FRESH RECORDS MILK TEST FAT NO. LB. PCT. LB. NO. YEAR HOLSTEIN 2 14310 4.0 570 14310 4.0 570 12289 3.7 12721 4/1 4.0 134.15 3.5 3.1 3.5 11876 3.6 3.4 11290 4.3 480 11290 4.3 14562 543 3.6 3.3 3.9 10475 3.8 3.5 4.1 429 13505 487 3.8 3.8 12887 465 4.0 3.9 44 5 4.0 3.5 3.1 12308 12542 3.5 17 3.5 13710 3.5 3.5 4/8 3.3 2.4 3.4 13910 3.6 3.6 3.7 3.1 12893 3.7 3.5 486 3.9 467 412

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.	MILK	TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.	LB.	TEST PCT.	FAT	305-DAY C RECORDS NO.		FAT	YEARLY HE RECORDS NO.	MILK	
344296	. 1	2	8720	4.8	423	1948	JER:	9610	5.0	482						
					123	1950	i	7830	4.6	363						
34 67 83		2	6540	5.6	364	1947	2	6540	5.6	364						
357879		17	7608	5.4	409	1947 1948 1949 1950 1951 1952 1955 1956 1957 1956	2 2 3 2 1 1 1 1 2 1	6095 7075 8740 7030 8280 7830 6570 7250 7270 8170 6530	5.3 5.4 5.4 5.4 5.3 5.3 5.3 5.3	323 385 472 404 447 427 348 398 388 415 346	1 1 1 1 2	6420 7970 7730 9020 8305 7410	354 380 390 424 435 401	1 1 2	8676 7968 6339	444 419 428
361321	1	2	6965	4.9	336	1948 1949	1	6900 7030	4.8	328 343						
365436	1	3	6627	6.0	396	1949 1950 1951	1 1 1	6250 6220 741 0	5.9 6.0 6.1	366 373 449						
371000	11	34	6856	5.5	374	1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 5 8 1 4 3 2 3 1	6630 6616 7293 5310 8025 6943 6977 7330 5637 8420 8470 9460	5.2 5.4 5.0 4.9 5.6 5.6 5.7 5.9 5.3 5.5	345 357 405 260 450 386 391 421 322 450 467 519	1 1 2 2 2 1 1 1 1	8770 6300 6620 8330 8935 8190 9940 10380 9030 6110 9260	474 314 332 418 484 437 527 553 484 441 472	1	8807	46G
37 10 77	13	40	8025	5.3	422	1949 1950 1951 1952 1953 1954 1955	3 10 8 7 5 4 2	8950 8193 8056 8747 7220 7435 9165	5.1 5.3 5.3 5.1 4.9 5.0 4.8 4.8	466 431 423 445 351 369 432 440	2 2	7370 7540	381 393	1	8546	455
371588	23	65	7114	5.5	386	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	2 6 8 6 12 10 5 3 4 2 3 3	7390 7300 7020 6275 7567 6881 7938 8390 7783 6715 6057 6027	5.2 5.4 5.3 5.6 5.6 5.5 5.2 5.2 5.0 5.6 6.1	381 388 375 354 419 379 423 443 406 370 301 338 343	1 3 1 5 8 5 3 4 2 3 2	7960 7100 7780 9130 8078 8092 3767 8248 7180 8240 9495	430 404 392 466 417 401 430 410 322 361 502	4 2 4 1 3 2	8513 9603 8647 8676 7005 7276	444 477 443 458 349 384
37 29 36	23	47	7068	5.3	365	1947 1948 1949 1950 1951 1952 1953 1954 1955	7 7 7 3 6 5 3 2 4 3	5603 7809 6921 10653 7917 8372 8750 10390 6910 7930	5.8 4.7 5.2 5.0 5.3 5.2 5.2 5.1 5.1	304 367 362 534 423 432 457 532 356 417	1 1 2 2 3 3 3 2 2 2 2	15550 8030 9295 8560 6597 8363 8815 7595 9420	625 345 493 470 346 450 460 384 504	1 1 1	8807 8589 8295 8676	451
374737	8	26	8239	5.0	412	1948 1949 1950 1951 1952 1953 1954 1956 1957	1 6 3 3 3 3 1 2 3	8360 8195 7280 8877 7913 8397 7000 6295 8220 7230	5.0 5.0 4.9 5.1 5.7 5.1 6.1 5.7	418 408 356 456 443 425 427 359 414 412	2 3 2 1 1 3	8040 7960 7035 7500 8020 8147 8260	419 457 380 436 436 435 453	2 1 2 3 1	8077 8262 8284 7979 7859	464 426 432
371426) 15	44	7371	5.5	396	1948 1949 1950 1951 1952 1953 1955	5 11 9 3 5 5 2 3	6732 6369 7770 6480 8036 8490 8090 7590		359 341 426 357 442 467 415 391	1 5 4 1 3 1	8460 6680 7908 9370 7740 9010 8620	491 363 456 489 407 477 477	2 1 1	8557 9058 9025	476

457 TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR

SIRE NO.	DAUGHTERS NO.	RECDRDS NO.		TEST PCT.		FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY C RECURDS NO.		FAT	YEARLY HE RECORDS NO.		FAT
						1957	JERS 1	6040	4.7	285						
37 78 7	2 1	1	7820	5.5	427	1952	1	7820	5.5	427						
38051	0 5	10	5992	5.8	340	1948 1949 1950	1 3 6	5790 6537 7290	6.5 5.4 5.7	374 357 412	1 1 2	7220 4910 8160	435 268 458			
38274	3 3	12	8438	5.2	434	1947 1948 1949 1951 1953	3 3 3 1 2	7250 8117 7353 8510 9700	5.6	396 454 438 442 438	1	5790 7410 8580	3/4 366 378			
38665	6 21	34	73/5	5.3	394	1949 1950 1951 1952 1953 1954 1955 1957	9 5 4 7 2 3 2 1	6959 6746 8305 7157 6655 7870 9605 8420 7620	5.4 5.2 5.3 5.4 5.6 5.3 5.4 5.0 4.8	381 351 437 382 379 415 518 420 369	2 1 1 1 1	9795 5730 6990 10360 9080 8420	486 273 335 457 469 392	1	8186 7685 8578	389 356 398
38696	0 1	2	6500	4.9	316	1948 1949	1	7070 5930	5.0 4.7	351 280						
38721	3 34	95	7415	5.4	400	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	6 8 13 21 12 7 7 8 7 1 3 1	7297 7309 7572 7821 7604 8670 8629 7764 7717 9910 9973 10430 8470	5.6 5.5 5.5 5.5 5.4 5.4 5.3 5.1 5.0 5.4 4.8 5.1	397 399 418 430 410 470 451 395 383 537 475 532 393	1 5 4 4 6 5	7930 7968 8416 7425 7305 8800 8814 8413 8450 8910	423 435 394 382 459 452 430 455	2 5 3 2 1	0426 7965 8328 8137 9570 9298	514
38/42	2 21	54	8194	5.3	424	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	1 1 8 14 6 5 7 7 7 3 1	7490 4800 7654 8581 9300 7624 9059 9597 8610 11410	5.9 6.7 5.6 5.3 5.4 5.4 5.0 4.9 4.8 4.5	441 322 413 449 521 408 454 465 409 517 453	2 1 1 1	6415 7140 6250 9040 6720	358 374 324 410 360	2 1	6873 7706 8546	403
39232	4 2	4	5570	5.4	299	1949 1950 1951 1952	1 1 1 1	4610 7110 6220 6260	5.0 5.3 5.4 4.7	256 380 336 306						
39289	6 6	11	6283	5.4	341	1947 1948 1949 1950	3 5 2 1	6633 6320 7680 6750	5.5 5.4 4.9 5.1	364 345 380 347						
39520	8 1	2	7515	5.1	387	1949 1950	1 1	6950 8080	5.0 5.2	351 422						
39548	6 13	38	7212	5.3	381	1949 1950 1951 1952 1953 1954 1955 1957	3 9 8 8 3 3 2 1	82 1 8	5.0 5.3 5.5 5.5 5.4 5.0 5.0 5.0	442		9240 9420 9330 9297 9583 6120 6670 7520 10820	496	2 1 1	8040 8993 8055 7325	466 462 393 360
39559	4 6	17	7890	4.8	378	1940 1949 1950 1951 1952	1 6 6 2 2	7430 7777 7487 9105 8555	5.0 4.8 4.8 4.0 5.1	370 375 353 419 433						
39761	1 6	18	7639	5.2	391	1949 1950 1951 1952 1953 1954 1955	5 4 -3 2 1 1 1	8052 7318 9297 8295 7530 7830 7980 8250	4.9 5.0 4.9 4.7 4.9 5.3 5.0 5.0	387 407 450 384 368 417 397 410	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6450 6100 7900 7000 6080 7220 7610	354 330 420 363 327 365 371	1 1 1	8273 7957 8001	39 / 410 384
39881	5 4	6	6562	5.3	34/	1947 1948 1949	3 1	6997 7576 8∠10	4.9 6.0 6.1	340 452 498						

OH10

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SLRVILL IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRC

SIRE 0 NO.	AUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORUS NO.		TEST PCT.	FAT L8.	305-0AY C RECOROS NO.	MILK		YEARLY HE RECOROS NO.	MILK	
						1951	JER:	5190	5.5	285						
398840	414	142	8293	4.7	386	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	21 14 16 19 18 18 13 10 8 3	8417 8681 7956 8959 8403 8486 8158 8284 7703 10017 10700 8220	4.7 4.6 4.6 4.7 4.8 4.8 4.9 4.5 4.5	395 409 363 412 395 401 393 386 367 453 482 359	2 1 2 6 8 11 11 7 5	8670 6490 9040 8243 7568 8264 8195 7809 7908	418 329 478 443 413 449 425 417 405	9 6 5	8317 8193 7994	429 420 425
398870	2	2	7435	5.9	436	1949	1	8980 5890	6.0	538 334	1	7980	376			
400955	6	17	7639	5.6	428	1949 1950 1951 1952 1953 1954 1955 1956 1957	3 1 3 2 3 1 1 1	7807 9050 7597 8275 7167 8270 8080 6730 5190 7380	5.6 5.8 5.4 5.5 5.0 5.1 4.8 5.5	436 484 440 444 397 415 408 324 283 394	1 2 2 3 1 1 1	6960 6340 8080 7707 7660 6410 5420 4460	359 318 419 402 400 328 281 248 247	3 1 1 1 1	7819 7052 7663 6693 6082 6191	417 363 407 340 326 332
402647	1	1	8780	4.2	367	1948	1	8780	4.2	367						
402722	7	7	8956	5.0	446	1948	7	8956	5.0	446						
403112	12	26	7211	5.2	373	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 4 6 5 2 3 2 1 1	6990 7240 6877 6712 5465 6807 6850 6700 10880 10670	4.5 5.1 5.0 5.1 4.9 5.2 5.0 5.4 5.2 5.9	315 373 343 344 274 350 348 361 567 626	 	4930 4340 6840 8460 8620	259 233 363 444 492	!	5832 8448 B240	313 449 461
404921	13	41	6913	5.5	378	1948 1949 1950 1951 1952 1953 1954 1955 1956	1 4 9 6 7 6 4 2 1	8400 7658 6593 7605 7223 5193 6865 7450 7860	5.8 6.0 5.7 5.8 5.5 5.5 5.6 5.4 4.2 5.7	488 457 370 440 396 277 384 402 330 438	1 2 4 3 4 4 3 1	7020 5840 6568 6450 6378 6668 6660 7100 7590 7340	356 320 354 322 338 346 336 379 368 366	4, 3 1 1 1	6194 6646 6954 6194	323 345 246 353 349
405072	3	9	6405	6.0	386	1950 1952 1953 1954 1955 1956	2 1 1 2 2 1	7305 7720 7330 6390 5965 6280	6.0 6.1 5.9 6.3 5.9 5.9	433 474 431 402 351 372	1 1 2 2 2 1	8500 8870 8300 7190 7235 8440	409 468 424 374 374 435	1 2 2	8905 6507 7276 8480	465 341 374 439
405160	24	55	7251	5•2	376	1949 1950 1951 1952 1953 1954 1955	2 13 6 9 12 6 3	7260 7927 7028 7293 6683 6715 7573 8588		360 406 353 376 355 353 390 433	4 3 4 8 3 3 2	7970 6970 8030 8121 8793 8580 7225	427 371 421 459 453 447 391	2 3 3 2	8268 8364 7223 7788	440
406548	2	9	7727	5.7	433	1948 1950 1951 1952 1953 1954 1955 1956	1 1 1 1 1 1	6100 8250 8030 9430 8600 8830 9310 11440	6.2 5.1 5.5 5.7 5.2 5.3 4.9 5.0	381 421 438 534 443 472 460 578 537						
406981	1	3	6113	5.7	345	1947 1948 1951	1 1 1	4230 6220 7890	5.7 6.0 5.4	24 I 372 423						
406983	16	33	7837	5.3	407	1948 1949 1950 1951 1952 1953 1954	10 6 4 3 1	5975 7589 8262 7205 7907 7820 8085	4.9	323 400 417 410 430 586 397	ı	8300	374			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

		OF FRESH			KU3 FK					c 0v .	FOR SHENIAG	V.C. 4.				
	DAUGHIER	AVERAGE	BA 21	КE		۲	ELURU AV	ERAGE &	SA ZIK	E 8Y	FRESHENING			WEADLY HE	80 AVE	DACE
SIRE E	DAUGHTERS NO.	RECORDS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.		RECOROS NO.		FAT	YEARLY HE RECORDS NO.		FAI
						1955	JER	SLY 9120	5.3	484						
406995	9	19	7 503	5+1	382	1950 1951 1952 1953 1954	3 5 3 3	7617 7150 6823 8060 8160	5.2 4.9 5.2 4.9	404 369 335 421 401	1 2	н / 30 ви10	455 403	2	7925	397
						1955 1956	1 1 2	9170 8430	5.0	397	1	61.40	320			
407306	1	4	8200	5.6	457	1957 1953	2	7920	5.4	407	1	6480 9480	329 507	1	9461	512
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·	·	0200	3.0	,,,,	1954 1956 1957	1 1 1	5520 11290 6920	5.7 5.7 5.4	313 649 376	i !	8030 9280 8550	422 443 433	1 1 1	9538 8927 8775	
408731	56	136	7648	5.3	401	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	11 14 29 24 20 14 11 6 5	8001 7777 8204 7960 7212 7731 8041 7643 7156 9445	5.5 5.3 5.3 5.1 5.1 5.1 5.2 4.9 5.1	439 430 430 414 380 392 411 396 359 475	5 12 12 9 7 5 3 1	7907 8019 8180 7669 8357 8612 7340 11750 8390	401 423 428 402 421 420 369 498 420	13 8 5 3 3 1	7794 8002 8275 9334 7950 10693 8415	404 412 417 456 404 525 425
409653	1	1	7050	5.7	404	1955	1	7050	5.7	404	1	8810	484	1	7565	449
409759	5	11	8075	5.6	454	1947 1948 1949 1950 1951 1952	1 3 2 2 1 2	7110 7147 9360 8185 8800 8250	5.4 5.8 5.8 6.0 6.2	488 331 541 469 528 511						
411075	1	1	7680	5.2	401	1950	1	7680	5.2	40 I						
414443	25	61	7281	4.8	349	1950 1951 1952 1953 1954 1955 1956 1957	3 18 13 12 7 3 2 2	8437 7194 6846 7303 9004 7740 7765 7255	4.7 5.0 4.9 4.8 4.7 4.8 4.6 4.7	395 338 333 348 376 373 351 342 493	2 6 7 7 4 1 1 2	8675 7887 7419 7983 8758 7270 7360 8200 8840	406 389 403	4 3 1 1 2 1	7494 8422 9145 7358 7941 8393	378 431 470 367 393 438
416495	12	39	7817	5.3	414	1948 1949 1950 1951 1952 1953 1954 1955	4 7 7 5 5 3 1 3	7598 6596 7384 7588 8944 8293 8710 8057 9125		349 345 395 430 479 437 498 430 467	1 1 1 1 2	8030 8720 8860 9130 8960	420 464 464 481 474	1 1 2	8687 9058 9025	
417243	11	24	6216	5.6	340	1950 1951 1952 1953 1954 1955 1956 1958 1960	3 7 4 2 2 2 2 1	5233 6613 7360 8730 8440 8420 7745 11300 10480	5.5	299 359 411 491 466 481 412 594 526	3 1 2 2 2 1 1	9223 7190 8915 8920 9015 9390 8360 8090	484 394 429 459 457 447 418 425	2 2 1	9009 7172 10202 8131	329 516
419064	1	2	8580	5.0	428	1948 1950	1 1		5-2	481 374						
419248	40	62	8635	5.2	452	1958 1959 1960	21 28 1	8771 8954	5 • 1	44d 4 7 3 4 7 7	16 20 7	8199 8465 8621	431	14 20 3	7697 8751 8643	451
424323	9	21	7309	5.7	411	1951 1952 1953 1954 1955 1956 1957	1 4 5 4 1 1		5.5 5.2 5.1	414 447 410 510 474 375 331 267	1 2 2 2	9180 7540 8045 7990	340 389 399	1 2 2	6780 7908 8895	386 424
¥25¥60	81	185	7509	5.1	382	1950 1951 1952 1953 1954 1955 1956 1957 1956	6 15 42 46 36 21 7 3	7480	5.1 5.3 5.1 5.0	373 389 317 324 371	2 19 32 24 12 5 3	7870 7800 8164 7762 7921 8102 7164 7413 7895	410 425 405 411 424 383 390	24 22 10 5 3 2	8298 7864 7953 8022 8030 7887	417 418 423 403

0H10 460

TΑ

A8LE 15.							ARTIFICIAL STATE ONL		ING 0	RGANI	ZATIONSGR	ONPEO	8Y BR	ĿΕυ,		
	DAUGHTER	AVERAGE	BA 216	RE		F	RECURO AVI	ERAGE B	Y SIR	Ł BY	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOKOS NO.	MILK	TEST PCT.	FAT L8.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY C RECORDS NO.			YEARLY HE RECORDS NO.	MILK L8.	
						1959 1960	JER: 6 1	8925 9380	5.3	472 539	6 1	8492 8180	438 424	6	8211	432
426359	1	l ₄	8385	4.9	411	1950 1951 1952 1956	1 - 1	8310 7830 8950 8450	5.3 5.0 4.4 4.9	441 391 394 416	i 1 1	7570 8010 8780 8670	351 367 402 427	1	8687	405
430246	14	28	6932	5.1	347	1950 1951 1952 1953 1954 1955 1956	3 4 6 6 5 2 3	6607 7825 6862 6493 7237 6575 6160 9140	5.5 5.3 5.0 5.2 5.5 5.1 4.8 4.3	368 411 341 333 400 336 294 393	1 3 2 2 2 3	9480 7853 7790 8255 8240	50 I 399 412 445 444	1 1 2 3	8687 8687 6687 8186	452 465 360 438
431819	10	19	8079	5.2	417	1947 1948 1949 1950 1951 1952	1 3 5 5 2 1 2	7700 8487 7132 8120 7510 11050 9945	5.2 4.7 5.3 5.4 5.0 5.2 4.8	403 404 378 437 368 572 478	1 1 1	66 / 0 8840 9390	377 453 427			
432588	22	. 76	7857	5.2	404	1947 1948 1949 1950 1951 1952 1953 1954 1955 1956	1 4 10 14 11 10 8 8 5 3	7920 7850 7834 8000 8123 8707 7971 7631 8360 9027 7110	5.4 5.2 5.3 5.2 5.1 4.9 4.8 4.7 5.2 5.2	429 402 410 414 414 429 386 361 435 474 355	2 6 5 6 4 3	7140 8287 8674 8050 7545 7617 8350 9200	365 423 430 381 368 381 447	4 5 2 2 2 2	7464 7595 8764 8491 8775	359 301 398 421 438
432629	11	22	7648	5.0	379	1954 1955 1956 1957 1958 1959 1960	1 3 6 2 4 4 2	7510 7010 6880 7365 8023 7960 11055	5.0 5.1 5.6 5.3 4.9 4.3 4.4	379 361 381 394 389 345 481	1 4 1 3 3 2	10500 7028 8000 7780 8507 7595	50 / 34 7 394 394 43 1 405	1 5 2 2 2	8546 9446 7876 7668 7849	449 483 406 399 391
432741	20	42	6813	5.4	366	1951 1952 1953 1954 1955 1956 1957	1 7 12 9 7 4	7130 7071 6852 6778 6696 7075 6440 6970	6.2 5.6 5.5 5.2 5.4 5.7 5.5	440 393 373 353 362 404 354 366	4 9 8 4 2	8995 7106 7721 7973 8260	449 383 393 400 415	7 9 2 2	6853 7268 7363 7946	362 370 382 403
434170	30	96	7991	5.4	430	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 8 22 21 17 13 7 4	8870 7900 8067 8089 8121 7500 7887 9903 8430	5.7 5.4 5.4 5.4 5.4 5.4 5.4	504 428 432 437 433 406 426 534 452	1 14 13 14 10 8 3 2 2	8560 7635 7528 7566 9130 8183 7867 8595	436 411 364 396 475 418 403 429 399	11 9 10 7 3 2 2	7680 7968 8575 8318 8342 8584 8699	307 404 443 428 425 441
436532	? 29	69	8397	4.8	399	1951 1952 1953 1954 1955 1956 1957 1958 1959	4 16 13 10 8 4 6 4	8605 9278 8331 8271 8885 10360 9075 7215 7590	5.0 4.8 4.9 5.0 4.8 4.7 4.6 5.1	423 438 402 411 423 484 428 362 375	3 8 7 7 4 4 3 3	9700 8616 8749 8641 8757 8723 9928 9817 8067	478 435 438 446 450 444 514 511	3 6 8 2 5 4	8527 8172 8565 8796 8395 7900 8287	431 423 437 458 437 406 429
438877	7 39	89	7927	5.1	401	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 6 15 16 15 11 11 6	7240 8187 7969 7174 7362 8015 8227 8413 9373	5.4 5.3 5.1 5.1 5.2 5.2 5.1 5.1 4.7	391 433 404 362 380 413 416 418	3 9 8 10 9 10 3 8	7740 7701 7990 8592 8566 8139 8150 8696	437 399 413 449 445 421 418	7 4 9 7 9 3 7	8167 8750 8153 8312 7922 8259 8960	434 454 422 425 468 416 478
439617	7 14	27	7536	5.0	367	1952 1953 1954 1955 1956 1957	2 9 8 4 2 1	10130 7930 7325 6680 11675 8480 9510	4.1 5.0 5.1 4.9 4.1 4.5	403 386 362 318 470 380 446	0 0 2	7580 8253 7880 9a00 8270	382 398 377 469 386	4 4 1 1	7761 6638 4316 7685 8578	410 346 243 356 398
440103	3 61	120	7405	5.3	393	1952 1953 1954 1955	4 14 15 22	7673 7695 7272 7051	4.9 5.4 5.3 5.3	374 412 382 374	2 11 12 13	3015 7565 7988 8326	392 388 417 441	9 9	7889 7903 8180	402 413 425

OH10 461

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	KLCUROS NO.		TEST PCT.	FAT L8.	305-DAY (RECORDS NO.			YEARLY HE RECORDS NO.		
						1956 1957 1958 1959 1960	JER 16 14 17 15 3	5EY 6950 6996 7561 7495 9283	5.3 5.2 5.6 5.2 5.9	364 366 418 389 544	11 10 13 12 3	8250 7022 7968 7980 8720	431 473 420 408 451	10 7 7 5	7882 8261 7815 8225 8611	410 432 417 431 459
44164	3 3	7	7342	6.3	458	1952 1953 1954 1955 1958 1959	1 1 1 1 2 1	8950 7160 B250 5960 7060 6480	6.0 5.8 6.2 6.9 6.4 6.1	538 413 513 412 454 393	1 1 1 1 1	8860 8860 5650 7070 9100 8510	481 469 324 412 473 470	i 1 1 i	8164 3880 4316 8110 8764	464 206 243 440 469
44 17 9 .	3 47	99	7581	5.0	380	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	B 15 15 19 10 10 7 7 7 6	8064 7475 7637 7783 7187 8047 8600 8291 7987 8320 6430	4.9 5.2 4.9 5.1 5.2 5.1 4.9 5.3 5.0 5.6	393 382 371 396 369 406 420 438 398 462 324	5 3 13 6 6 5 5 3 1	8692 8107 7555 7562 8772 9314 7584 8110 8160 7460	446 442 401 402 421 474 404 426 419 383	11 5 3 4 2 2	7561 7839 8157 8445 8731 7134	387 403 436 422 455 394 402
44338	8 15	22	8644	5.2	448	1956 1957 1958 1959 1960	2 3 7 9 1	7590 9263 9710 8096 7330	5.9 5.2 5.3 4.9 5.1	447 482 512 400 374	1 3 5 7 1	8690 11283 10070 7911 6860	460 601 516 401 351	2 3 6	10110 9796 7930	523 509 411
44446	8 1	1	8240	5.4	443	1959	1	8240	5.4	443						
445150	0 1	2	9415	5.4	507	1954 1955	1	10130 8700	5.4 5.4	542 471	1 1	9120 11250	469 525	1 1	9690 10355	477 574
44610 <u>)</u>	3 63	146	7341	5.4	393	1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 17 26 28 28 22 11 7	5925 7501 7238 7917 7991 7606 7685 8143 7550 9530	5.9 5.5 5.4 5.5 5.2 5.2 5.2 5.1 5.5	348 411 388 436 417 390 401 419 412	1 7 14 16 15 12 8 3 3	8160 8063 7644 7634 7816 7917 8268 9203 8423 7580	445 421 393 406 400 38B 423 463 433 391	10 14 12 10 8 3 2	7958 8200 8320 8671 8434 8967 9102	404 434 438 447 432 451 467
44643	1 20	56	6911	5.0	347	1950 1951 1952 1953 1954 1955 1956	2 13 12 8 7 6 5	7310 6436 6837 7308 7246 7487 7276 8350	4.9 5.2 5.1 5.0 4.9 5.0 4.8	355 335 350 365 352 374 346 404	4 8 5 5 4 3	7333 8514 7966 8026 8318 7843 9550	378 426 402 411 434 399 439	1 3 4 3 1	8687 8422 8134 8498 7249	452 447 424 452 383
44772	3 6	21	6973	5+6	385	1947 1948 1949 1950 1951 1952	5 2 5 4 2 2	6930 6185 7758 7290 7115 5135 5200	5.4 6.7 5.6 5.3 5.6 5.7 6.1	367 412 442 383 400 295 318	1 2 1	8060 8400 8900 7650	480 454 409 396	1	7521	402
44799	8 3	5	7107	5.5	378	1955 1957 1958 1959	2 1 1 1	5275 11520 9610 5480	5.2 4.9 5.0 6.2	273 560 477 341	1 1 1	9440 9480 6530	510 495 362	1	9025 7325	488 421
448639	9 6	14	6625	5.6	367	1950 1952 1953 1954 1955 1956 1957	1 5 1 2 2 2 1	6584 5590 7180 7095 7210 9850		384 365	1 3 1 1	7460 7483 6290 7150	389 336	1	7728 7096	
4509B	1 1	1	6440	5.4	347	1952	1	6440	5.4	347						
45114	1 1	3	9480	5.6	533	1954 1955 1956	1 3 1	9690 10640 8110		601	1 1 1	86.30 84.30 7.090	447	1	7935 8513	
45234;	2 1	6	6905	5•2	360	1952 1954 1955 1956 1957 1958	1 1 1 1 1	7330 7690 5740 6870	4.9 5.3 5.3 5.2 5.0 5.5	301						
45350	0 46	120	7545	5.2	391	1948 1949 1950	1 4 14	6113	5.5 5.3 5.3	326	2	8270	436			

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,

5.2

5.2

9146 5.3 477

79×7

3/4

5.2

5.1

8276 5.3 438

H

0H10 463

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

OAUGHTER AVERAGE BY SIRE

	OAGO!!!E!!	ATENADE	01 31.					LIVAUL L	,, 51.		NE STETTE TO					
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECOROS NO.		TEST PCT.	FAT L8.	RECORDS NO.			YEARLY HE RECOROS NO.	MILK	
						1957 1958 1959 1960	JER: 30 48 63 16	7814 8274 8752 9123	5.4 5.3 5.3 5.2	415 432 456 473	15 25 44 12	8594 8086 8266 8468	433 418 420 432	14 16 37 5	8305 8378 8341 7575	408 447 422 393
468989	9 1	4	6268	5.1	317	1954 1955 1956 1957	1 1 1	7470 6950 5300 5350	5.2 4.8 5.3 4.9	389 336 278 264						
47 15 34	4 1	1	13750	4-6	633	1958	1	13750	4.6	633						
473215	5 67	96	9039	4.9	439	1958 1959 1960	35 52 9	10025 9105 9170	4.7 4.8 4.9	466 437 449	18 44 9	9408 7548 8048	478 386 418	16 34 3	9124 8479 7151	471 433 376
473218	3 20	21	7364	5.1	377	1958 1959 1960	16 1	8075 7340 6410	5.3 5.2 4.2	432 374 271	2 16 1	8555 8714 6970	425 420 339	1 14	8099 8799	366 425
47400	7 2	3	10968	5.1	554	1959 1960	1 2	11140 10775	4.8 5.1	539 549	1 2	10040 9550	507 504	1	9701	509
47464	3 1	14	8908	6.1	541	1956 1957 1958 1959	1 1 1	8970 10210 7570 8880	6.1 5.8 6.4 6.1	543 595 486 538	٤	7330	304			
475680) 1	2	7020	4.8	338	1959 1960	1	7720 6320	5.0	384 292	1	7060 6890	369 311			
476084	+ 1	1	4950	5.3	263	1959	1	4950	5.3	263	·	0070	J			
476142	2 13	20	7759	5.8	449	1953 1954 1955 1956 1957 1958 1959 1960	1 3 3 2 5 2	6500 6537 6810 7620 7125 8108 7560 9990	5.9 5.7 5.6 6.4 5.9 5.9 5.6 5.1	386 373 382 483 416 476 428 514	1 2 2 2 2 2 2 2	6640 7970 10925 10760 7510 8040 8025 12950	349 408 616 599 388 451 427 518	1 2 1 2 2 1 2	7728 6426 6540 8633 7952 8567 8028	409 325 335 468 428 455 438
476495	5 12	15	8383	5.1	428	1958 1959 1960	5 7 3	8660 8317 8777	5.2 5.0 5.2	452 408 462	4 7 3	9060 7780 8657	469 401 431	3 7	8916 7985	467 402
477781	+ 1	1	8890	5.2	460	1954	1	8890	5.2	460						
478650) 2	2	7810	4.9	377	1957 1958	1	8680 6940	4.0 5.8	350 404	1	9620	499	1	9025	488
47908	1 23	35	8422	5.0	421	1951 1952 1953 1954 1955 1956 1957 1958 1959	4 3 1 2 3 4 3 5 8 2	8370 8973 7300 8410 9130 8653 7803 7580 7624 8185	5.4 4.9 4.7 4.7 5.1 5.1 4.8 5.1 5.1	440 438 341 399 462 442 371 380 391 385	2 2 1 2 8 2	8395 8895 7520 7350 8159 6360	462 490 371 412 432 330	2 2 1 6	9396 9238 7913 8439 6987	512 494 413 436 391
48026	7 3	4	8020	5.3	4 3 0	1958 1959	1 3	9080 7500	5.4 5.3	491 397	1 2	9420 9475	507 491	1	9025 7913	488 398
482207	7 2	6	8288	4.6	381	1951 1952 1953 1954 1957	1 1 1 1 1	7650 8520 8590 8320	5.0 5.3 5.2 5.2 4.0	385 452 446 429 332 437	1 1	9000 9970 10870 6870	451 537 512	1		
48286	1 1	2	9590	5.4	520	1958	2	9590	5.4	520	1	11030	565			
483841	4 6	10	7910	4.9	390	1955 1956 1957 1958 1959	1 4 2 2 1	8410 7905 6975 6930 8590	4.7	379 385 324 334 450	1 3 1	8770 7893 6810	409 380 316 476	1 2 1	9385 8442 8567 7903	471 429 423
48403	1 36	61	8342	4.9	409	1955 1956 1957 1958 1959 1960	4 7 7 17 23 3	8643 7917 7591 7595	4.8 5.1 5.2 4.8 4.9	418 400 395 373 415 457	4 6 3 5 13	10615 8975 8177 9610 8317 8090	492 451 423 477 413	2 5 4 4 13	8099 8772 8153 8154 8503	407 429 416 423 419
48615	7 2	3	7655	5+2	396	1956 1957 1958	1	7210 6390 8510		370 349 432	1	7210 7280	359 343	1	6486 6878	317 332
488286	0 23	43	7974	5-6	446	1951 1953 1954 1955	1 11 12 5	8161	5.2 5.5 5.5 5.1	431 452 445 460	1 5 7 2	8630 7610 7929 7750	414	4 4 1	8262 7867 9058	44 I 422 476

0H10

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	BY SIR	E		R	ECORD AV	CRAGE E	BY SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	OAUGHTERS NO.	RECOROS NO.		TEST PCT.	FAT LB.	FRESH YEAR	RECORDS NO.		TEST PCT.	FAT LB.	305-DAY (RECURDS NO.	CONTEMP MILK LB.		YEARLY HE RECUROS NO.	RO AVL MILK LB.	RAGE FAT LE.
						1956 1957 1958 1959 1960	JER 3 2 1 4	8713 8720 7120 9608 7990	5.0 5.7 6.5 5.8 5.2	443 494 461 547 410	2 2 1 4 4	9805 8570 9610 9035 7523	530 448 496 464 388	1 1 1 3	9025 8197 9025 8495	480 446 488 458
488392	2 69	119	7709	5.1	389	1955 1956 1957 1958 1959 1960	3 12 17 27 47 13	11013 8543 7446 8383 7650 7698	4.9 5.0 5.0 5.0 5.0	528 414 368 415 384 394	1 5 7 15 33 12	9850 9184 7551 8369 7795 8307	481 452 385 413 397 437	3 7 12 23 6	9875 8183 8419 7915 6044	485 407 436 407 413
49117	¥ 30	30	7704	5 • 1	388	1959 1960	18 12	7465 8063	5.1 5.1	377 405	17 10	7756 8415	399 428	12 1	8542 6518	432 355
496820	0 1	1	10030	5.3	528	1960	1	10030	5.3	528	ı	8550	436	1	8611	459
497599	8	13	8427	5.2	435	1957 1958 1959 1960	1 3 5 4	9260 9400 8206 8018	5.1 5.0 5.1 5.8	474 473 412 461	1 2 5 3	9670 9190 8628 9390	519 500 448 492	2 5	9025 8973	488 481
49920	7 122	170	7917	5.2	411	1958 1959 1960	36 86 48	8642 7745 8241	5.2 5.2 5.3	451 401 431	21 65 34	8928 7717 8192	440 394 417	16 53 10	8362 8093 755 1	432 405 388
5002 1	5 3	3	4400	4.5	196	1960	3	4400	4.5	196	2	5500	289	1	8611	420
50092	9 1	1	8790	6.5	571	1959	1	8790	6.5	571	1	10300	549	1	9701	509
50121		3	9 120	5.5	505	1953 1954 1955	1 1 1	9300 9520 8540	5.5 5.8	491 525 499						
50211	4 7	7	9190	5.0	447	1959 1960	6 1	8968 10520	4.9 5.1	432 539	5 1	9110 9710	470 487	6	9332	496
50316	0 13	23	7890	5.3	423	1958 1959 1960	12 10 1	8791 8113 3880	5.3 5.4 4.5	468 439 173	8 8 1	8226 8268 7510	434 432 380	3 5	80 44 86 7 0	432 465
50353	5 34	43	7388	5.0	368	1958 1959 1960	8 29 6	7728 7209 7198	5.2 5.0 5.2	398 355 368	6 24 6	8195 7313 6445	421 381 344	3 12 1	7594 8250 8611	397 423 420
50396	8 52	70	7400	5.4	395	1955 1956 1957 1958 1959 1960	1 3 6 15 38 7	4380 7287 6348 7661 7278 8170	5.6 5.5 5.2 5.4 5.4	244 403 330 414 389 436	2 5 9 33 6	6960 7550 7818 7547 8602	352 384 411 387 444	1 5 6 19 2	7892 7916 7354 8334 8192	393 383 385 426 405
50445	5 2	2	7320	5.6	409	1958 1959	1 1	7420 7220	5.3 5.9	393 424	1	8470 8050	435 425			
50669	7 8	10	9556	5.1	484	1958 1959 1960	2 7 1	9730 9394 10880	5.3 5.0 4.7	515 469 510	1 7 1	9400 9040 9780	494 476 489	7	9025 94 5 0	488 507
50807	8 28	33	8258	5.4	440	1959 1960	26 7	8222 8243	5.4 5.2	441 431	2 I 6	8180 8187	427 437	20 3	8713 7772	445 400
50817	6 I	1	11010	4.8	526	1959	1	11010	4.8	526	ì	8800	459	1	9450	509
51032	2 4	8	8379	4.9	400	1959 1960	7 1	8580 7 480		419 409	1	8990 9 44 0	460 469	3	9236	493
51100	1 12	13	8073	5.8	463	1956 1957 1958 1959	4 1 4	8460 10740 7293 8295	5.3 6.0	471 572 433 473	4 1 4	9650 8860 7838 8810	524 489 412 457	4 1 1 3	9025 9025 8110 8807	484 440
51254	5 85	106	8 3 3 2	5.1	420	1957 1958 1959 1960	1 34 53 18	9390 8072 8269 8841	4.8 5.1	552 391 422 438	23 48 13	7939 7657 8340	412 404 447	9 23 1	82 54 8170 7565	
51488	4 3	8	7325	5.5	401	1958 1959 1960	3 3 2	8277 6573 7720	5.8	428 378 420	2 2 2	8755 8265 10565	431 393 550	2	8720	431
51498	1 1	3	12970	4.9	634	1959 1960	2 1	12990 12930		635 633	1	10670 9860	553 523	1	9701	509
51708	1 6	11	8008	5.3	414	1957 1958 1959 1960	1 7 2 1	8360 8513 8035 11820	5.3 5.4	358 442 430 568	 4 2 1	8320 8203 8120 7740	425 427 428 342	1 4	7837 8339	
51708	2 2	3	7610	5.4	397	1958 1960	2	7465 9710		400 439	2 1	7565 7500	397 368			
51898	8 1	1	9660	4.4	426	1960	1	9660	4.4	426						

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BRLED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	OAUGHTER	AVERAGE	8Y SIR	E		R	ECORO AV	ERAGE E	BY SIR	ЕВҮ	FRESHENING	YEAR				
	DAUGHTERS						RECOROS		TEST		RECOROS	MILK	FAT	YEARLY HE RECOROS	MILK	FAT
NO.	NO •	NO.	LB.	PCT.	L8.	YEAR	NO. JER		PCT.	L8.	NO.	LE.	L8.	NO.	L8.	LB.
520051	76	98	7506	5.2	385	1958	19	7345	5.1	372	12	8439	423	11	8431	433
320031	10	,,	1300	302	303	1959 1960	62 17	7540 7369	5.2	388	52 15	8001 7648	406 387	42	8093 7434	412 373
521647	3	5	9241	5.0	460	1955 1958	1 2	7200 12950	4.8 4.7	346 614	1	8860 8180	477 448	1	9396 8110	512 440
522014	1	1	6960	5.8	404	1959	2	9435 6960	5.2 5.8	489	2	7730 6640	421 343	2	8219	435
525996	1	3	9980	5.2	524	1959	3	9980	5.2	524	2	10585	558	2	9701	509
526397	7	7	8970	4.7	422	1957	1	13110		581						
						1958 1959	2 4	7655 8593	4.6	352 418	1 4	6850 8565	383 413	2	7837	393
526408	1	2	6295	5.1	316	1955 1957	1	5540 7050	5.0 5.1	275 356						
5268 19	7	10	10071	5.1	511	1956 1957 1958	3 5 2	10423 9924 9925	5.3 5.1 5.2	548 505 509	3 5	10193 8778	522 443	3 5 2	9254 10061 9625	497 516 482
527147	17	21	7853	5.1	403	1958 1959 1960	4 12 5	8153 8168 8676		407 428 443	10 4	7713 7987 7685	404 426 402	3 5	8222 8940	438 485
529293	30	38	7727	5.1	403	1958 1959 1960	6 22 10	8153 7519 8131	5.3 5.2 5.0	431 392 419	5 19 7	8156 7762 7270	427 396 384	3 7 2	7866 8384 7914	402 441 410
529355	2	Ц	7410	5.2	386	1957 1958	1 2	7990 6730	5.1 5.2	407 549	1	6080 6690	30 I 320	1	6202 7336	3 5 1 39 9
531188	1	1	7160	5.4	384	1959	1	7030	5.4	397 384	1	6540 8880	313	1	6475 9450	334
534119	2	2	9730	5.2	496	1958	1	10900		529	1	8510	469	1	8208	443
						1959	i	8560	5.4	463	i	9980	493	·	0200	
534366	6	12	8024	5.4	430	1956 1957 1958	2 4 4	8120 6400 8885	5.2 5.2 5.6	422 327 489	2 4 1	8015 6995 9880	425 338 54 I	1	6486 7428	351 402
						1959 1960	1	9190 9280	5.2	475 509	i	8480 9030	469	1	85 13	470
534381	3	5	7795	5.3	414	1958	1	8930	5.3	471	1	10980	490	1	11652	516
						1959 1960	3 1	7023 8860	5.5 5.1	386 454	2	8050 10810	414 487	2	7390	385
534455	12	21	7896	4.8	378	1955 1956	2	6205 6655	4.6 4.5	283 299	2	7540 8170	384 425	2	6605 7350	325 373
						1957	4 5	7228 7902	4.6	325	3 2	7770 7145	378	2	6878	332
						1958 1959	5	10666	5.2 4.8	412 509	3	8553	376 423	2	8568	447
						1960	1	11410	4.3	494		8310	461	1	8175	445
534585 534758	1	1	6320	4.9	311	1959	1	6320	4.9	311	1	5590	312	1	0701	500
	'	1	8770	5.3	465	1959 1957	1	8770	5 • 3	465		10300	559	,	9701 9745	509
53 55 04	'	2	6370	6.3	401	1958	1	5440	6.4	451 351	1	8680	351	'	7143	378
542372	1	1	6270		352	1960	1		5.6	352	1	7310	372			
544397	2	2	7990	5.6	443	1959	2		5.6	443	2	8925	469			
546648	ŢŤ.	5	7540	5.0	380	1958 1959 1960	2 1 2	10560	5.2 5.3 4.6	371 563 291	1 1 2	8840 9090 8415	463 490 402	1	8513 7783	470 385
550722	2	2	8175	5.3	430	1957 1958	1		5.7 4.9		1 1	10100 8360	528 442	1	6202	331
550723	1	3	6307	5 • 2	331	1959 1960	2 1	6480 5960	5.2 5.3	340 314	1	8020 9590	421 561	1	7924	434
557267	2	2	6290	5.0	310	1958	2	6290	5.0	310	1	6620	364			
557268	6	7	6902	5.4	382	1958 1959	4 3	7758 5960		438 314	2 3	7700 9647	407 513	2	9064	449
558300	1	1	2380	5.6	133	1959	1	2380	5.6	133	1	4300	218			
56 1488	1	2	4150	5.6	234	1959	2	4150	5.6	234				1	8273	410
562315	43	58	8460	5.2	443	1958 1959 1960	21 29 8	9093 8324 8034	5.2	483 433 418	15 28 7	7914 7920 7461	403 414 398	9 15 1	8386 7790 7565	
563658	1	1	8610	4.9	425	1960	1	8610	4.9	425						
567066	28	34	6759	5.5	374	1959	27	6950	5.5	385	20	7347	383	14	7711	412

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED, BY YEAR OF FRESHENING--RECORDS FROM THIS STATL ONLY

OAUGHTER AVERAGE BY SIRL

SIRE NO.	DAUGHTERS NO.	RECOROS NO.		TEST PCT.		FRESH YEAR	RECUROS NO.	MILK LB.	TEST PCT.		305-DAY CORES	MILK		YEARLY HE RECORDS NO.	RD AVE MILK LB.	FAT
						1960	JERS 7	EY 7214	5.2	374	7	7377	382	1	6889	371
56963	5 14	15	7454	5.1	371	1959 1960	13	8149 6313			8 2	8603 6585		5 3	8744 7114	

DH1D 467

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

	8Y YEAR DAUGHTER				RDS FR		STATE ONI		BY SIR	E 8Y	FRESHENING	YEAR				
											305-DAY (DNTEMP	_ AV.	YEARLY H	ERD AVE	RAGE
SIRE NO.	NO.	ND.		PCT.		YEAR	NO.	L8.			RECORDS NO.	MILK LE.	LB.	NO.	MILK L8.	LS.
33535	5 2	ц	Q 1. J. 7	4.1	394	1951	BROWN :		3.9	339	1	8290	370			
3333.	, 2	4	7441	4.1	374	1952 1953	1 2	6760 9320		274 385	1	8970 11195	333	1	9112	372
35299	2	10	10697	4.1	433	1947 1948 1949 1951 1952 1953 1954 1957		10760 12390 11405 14030 9320 11100 11390 11800	4.2 4.3 4.0 4.0	440 522 471 605 369 448 454 428						
37565	5 1	2	13110	4.5	586	1950 1951	1	12540 13680	4.5	563 609						
380 49) 1	2	9645	4.2	406	1953 1954	1	9110 10180		386 426	1	10190	422			
4008	1, 1,	7	10895	3.9	421	1951 1952 1953 1957 1958 1959	2 1 1 1 1	10715 14040 12620 13880 12310 10030		445 563 501 491 433 393	1	10100	416	1	10301	424
40901	8	16	8463	4.5	377	1950 1951 1952 1953 1954 1956	1 3 4 1 3 2 2	3610 7647 9705 14040 10077 11080 10100	4.3 4.5 4.1	172 329 436 571 443 496 488	1	14490	578	1	10715	446
43108	3 19	51	9422	3.8	353	1949 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 4 7 8 7 6 6 5	9500 9053 10917 9710 10457 10822 10897 10026 8420 10305	3.7 3.8 3.6 3.6 3.7 3.8 3.0 3.5 4.0	355 345 391 344 381 404 399 353 319 376	1 2 2 2	9160 10220 9700 12250 9180 10010	357 374 395 432 353 386	1 1 1	9091 9527 8731 12840	335 365 330 538
43300	2	3	15638	4.0	586	1947 1953	1	9670 18210	3.5 3.7	335 672						
4 58 92	2 4	9	11328	4.1	458	1948 1949 1950 1951 1959		12090 13290 9775 13400 11270 9890	4.0	504 541 381 557 443 421		11030 12060		1	12840	538
46136	5 2	5	9179	4.2	380	1947 1948 1949 1951 1953	1 1 1 1	9920 11170 11500 6120 8680	4.7 4.3 4.0 4.6 3.7	466 481 457 280 538						
46163	3 13	38	10998	4.2	462	1948 1949 1950 1951 1952 1953 1954 1955 1956		8645 14540 13168 11163 11398 11785 10710 13050 11153	3.9 4.1 4.3 4.2 4.3 4.3	580 560 532 475 482 501 465 526 440 433	2 4 6 6 3 4 5	12630 11913 10607 10785 10987 11965 10433	438 467 429 431 450 484 460	6 3 4 3	11695 9592 10137 11598	476 392 412 471
4745() 2	7	10977	4 - 1	449	1949 1950 1951 1952 1953	1 2 1 2 1	14570 10985 14220 11150 12210	4.2 4.3 3.6 4.0 4.0	606 470 540 448 482						
48098	3 1	2	11850	4.3	505	1955 1956	1	12150 11550	4.1	501 508	1	10400 9630	413 389	1	9385	376
48341	+ 1	2	10065	3.9	384	1956 1957	1	9990 10140	3.9 3.8	387 380	1	8790 7720	359 324	1	9385 9086	376 3 7 2
48672	2 13	43	11247	4.3	476	1951 1952	2 5	10480	4-4	461 452	1	10270	392			
						1953 1954	5	12024 12152	4.3	514 517	2 2	11310 10980	447 444	1 2	12808 11614	509 446

TABLE 15.--OAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE DNLY

	OAUGHTER	AVERAGE	8Y SIR	ΚE		R	ECORD AV	ERAGE 8	SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	KECORDS NO.		TEST PCT.	FAT L8.	305-DAY (RECORDS NO.			YEARLY HI RÉCORDS NO.		
						1955 1956 1957 1958 1959 1960	BROWN 2 5 4 5 7	SWISS 13570 11216 13875 11590 11607 10410	4.5 4.1 4.3 4.5 4.2 4.7	603 468 586 532 489 489	1 1 2 1 3	10280 11010 12240 12720 12760	422 442 521 579 519	1 1 2 1 3	11827 11521 12579 13145 11925	470 469 529 571 497
48699	2	2	14010	4.2	570	1947 1953	1	10140 17880	4.4	442 697						
48949	20	49	9754	4.3	414	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	2 5 5 11 6 3 6 4 2 4	10160 9566 9314 9419 11240 10583 9585 9553 11465 11170 10430	4.3 4.5 4.3 4.2 4.3 4.1 4.0 4.0 4.2 3.7	426 423 396 401 474 442 390 404 452 468 383	1 2 2 2 3 3 3 3 2 1	12220 10900 11770 11330 11277 11040 10210 11505 10430 11170	483 422 466 479 473 457 427 482 431 479	3 3 2 3 2 1 3	9919 10962 11936 10068 10927 11859 7350	396 453 484 419 450 502 458
48950	6	12	10110	4.1	418	1949 1950 1951 1952 1953 1954	2 3 2 2 2 1	7140 10747 11575 11245 11055 11390	4.0 3.9 4.3 4.1 4.2 4.2	287 433 501 461 464 482	1 1 1 2 1	12150 13450 11690 12250 15340	495 555 459 459 585	1	12001 11609	474 455
49266	36	92	10374	4.2	430	1951 1952 1953 1954 1955 1956 1957 1958 1959	1 9 18 13 9 13 10 8 10	8180 10097 10434 9863 12154 11412 12467 10858 11511 11370	4.5 4.2 4.1 4.1 3.9 4.2 4.0 3.9 4.2 4.1	366 425 427 400 470 470 496 418 476 468	5 10 6 8 8 4 2 4	11534 11357 11868 11554 11500 11593 8455 11648 10610	446 453 470 455 451 468 349 480 442	3 5 8 9 5 2 4	10352 11151 10568 10576 10907 9805 11516 10889	420 452 417 422 438 413 471 436
49268	3	9	14430	4.1	589	1947 1948 1950 1951 1952 1953	4 1 1 1 1	14475 16750 15980 15290 16040 16900	4.1 4.0 3.7 3.9 4.0 3.7	590 665 584 595 649 622						
49411	20	ւ կ Լ կ	10467	4.0	419	1952 1953 1954 1955 1956 1957 1958 1959 1960	5 10 8 6 6 1 6	11382 9627 10193 10135 12658 11480 10833 13330 9710	4.0 4.0 3.9 4.1 3.9 4.2 4.1 4.2 3.7	462 386 390 412 499 478 438 562 361	2 7 5 3 2 2 1	10650 10563 11102 9830 11005 8165 11780 10140	435 423 434 399 456 321 501 408	5 5 4 2 1	9799 10527 10314 10606 6507 12644	396 423 410 429 286 533
5 1675	17	36	9890	4.1	405	1952 1953 1954 1955 1956 1957 1958 1959	2 5 7 4 7 6 2 3	7690 8932 10551 11658 10771 10042 9815 9967	4.0 4.2 3.9 4.1 4.1 3.7 4.3	291 356 447 453 439 412 347 426	3 3 4 2 1 2	9257 11487 11183 11610 10335 10560 10300	349 489 438 479 428 425 429	2 2 3 3 1	8938 11614 10878 12458 11369	338 446 436 517 470
51890	1	2	9440	3.8	362	1957 1958	1	10880 8000	3.9 3.7	427 296						
53681		1	11350	3.8	428	1948	1	11350	3.8	428						
537 16	33	54	9913	4.1	410	1954 1955 1956 1957 1958 1959	5 8 12 8 7 13	9534 10331 10971 9070 8781 9738 8400	4.1 4.1 4.1 4.4 4.1 4.2 4.1	387 417 454 401 358 404 343	2 5 8 1 3 3	10840 9232 10671 6320 8310 10093	436 370 448 266 340 390	3 5 4 2 2 1	10777 9703 9802 9696 8219 8742	390 404 402 349
53913		1	10800	3.5	381	1956	1	10800	3.5	381	1	11460	444			
57699	65	144	10838	4.1	цц5	1953 1954 1955 1956 1957 1958 1959 1960	10 18 17 26 22 24 22 5	11696 11096 11768 10532 10536 11149 10425 12138	4.1 4.0 4.1 4.1 4.2 4.2 4.2	481 446 485 432 442 466 437 509	4 6 12 16 13 6 13	11110 11823 10590 10936 10715 10922 11457 11920	434 478 413 454 443 443 479 485	3 6 10 11 11 7 10 2	9527 10777 10655 10639 10444 10142 11398 11413	393 444 431 439 430 422 473 496
59699		1	11690	4.6	536	1960	1	11690	4.6	536	1	11080	484			
598 11	6	8	8012	4.2	337	1951 1952	2	7925 7600	4.4 4.2	342 319	1	10330	423			

OH10 469

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROOPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGITER AVERAGE DI SIRE		DAUGHTER AVERAGE	вч	SIRE	RECORD	AVERAGE	8 Y	SIRE	8 Y	FRESHENING	YEAR
--------------------------	--	------------------	----	------	--------	---------	-----	------	-----	------------	------

	DAUGHTER	AVERAGE	BY SIR	RE		R	ECORD AV	ERAGE 8	BY SIR	E 8Y	FRESHENING	YEAR				
SIRE NO.	DAUGHTERS NO.	RECORDS		TEST PCT.	FAT LB.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-0AY (RLCORDS NO.			YEARLY HI RECORDS NO.	MILK	
						1953 1954	BRUWN 1 1	SWISS 10410 7450	4.4 4.1	454 309	1	9900	410	1	105 19	446
60137	3	10	11046	3.9	432	1952 1953 1955 1956 1957 1958 1959	1 2 1 1 1 3	9650 11520 11360 11290 9510 10743 10500	3.9 4.1 4.0 4.1 3.6 3.6	319 418 457 459 357 406 374						
60560	11	27	9217	4.2	381	1952 1953 1954 1955 1956 1957 1958	1 6 5 3 1 3 5	7150 9177 9508 11953 8380 9145 9480	4.8 4.2 4.0 3.9 4.0 4.3 4.2	344 379 376 457 331 396 399	1 2	13250 12320 12040	546 514 498	1 1 2	12001 11925 12764	474 498 510
						1959	3	8180	4.3	355	1	10960	431	1	10137	396
6 15 64	. 13	27	9753	4.2	409	1951 1952 1953 1954 1955 1956 1957 1958 1959	2 6 5 3 2 5 2 1 1	8520 9500 10646 11640 111100 9850 10420 10360 5410	4.2 4.1 4.2 4.2 4.2 3.9 3.8 4.5	352 400 436 482 466 415 405 390 242	1 2 3 1 2 2 2 1 1	6970 8090 8383 8130 10245 11535 9490 9970 10940	326 320 355 351 427 499 412 398 501	3 1 2 1 2 1	8662 9690 8775 9963 10083 9254 8785	356 428 368 420 424 391 374
61567	46	79	10794	4.3	462	1951 1952 1953 1954 1955 1956 1957 1958 1959	3 9 6 8 4 9 8 12 19	10813 10703 11687 10459 11420 10002 9599 11124 11949	4 - 1 4 - 4 4 - 2 4 - 6 4 - 3 4 - 4 4 - 5 4 - 4 4 - 1 3 - 8	436 465 493 480 494 435 436 484 484	2 2 3 4 4 7 2 4 11	10755 10330 11420 11718 11123 10619 10570 8525 9835 9380	409 416 465 476 443 449 424 357 413	2 3 1 6 1 3 10	11217 10650 10028 11194 10682 9280 10306 9538	438 435 425 458 422 382 418 372
62078	1	1	7980	4.0	322	1955	1	7980	4.0	322	1	8240	329			
62227	1	2	12870	4.0	517	1955 1956	1	13010 12730	3.7	484 549	1	12560	525	1	10388	409
62228	1	1	12370	4.5	552	1957	1	12370	4.5	552						
62573	1	2	11475	3.9	448	1952 1955	1	13630 9320	4.0	548 347	1	15940 3690	626 326	1	10889	433
64541	1	2	12155	4 - 3	519	1958 1959	1	13670 10640	4.2	569 468	1	10960 12660	453 498	1	11325 12502	463 498
64773	3	5	9759	4.2	410	1958 1959	2 3	8270 9843	4.2	349 412	1 3	10510 10027	410 385	1	16333	407
64837	3	4	06111	4.1	458	1955 1958	1	13370 8670	3.8	512 393	1	8950	358	1	10824	443
66102	36	79	11283	4.1	463	1959 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960	3 6 16 16 4 11 10 6 6	8553 10725 11573 11525 11918 11845 11224 12305 13393 13100	4.2 4.2 4.2 4.1 4.3 4.1 4.1 4.1 4.3	430 452 481 454 516 488 453 502 524 560	1 2 7 9 3 7 5	7900 9040 9833 11767 10773 10056 10648 10140 12670	453 319 357 392 475 439 416 433 401 511	5 8 3 7 5	9483 40790 10544 10621 10782 16333	392 434 429 431 440
66318	1	1	12310	4.3	530	1954	1	12310	4.3	530	1	11750	485	1	7968	331
67525	1	1	11840	3.8	450	1957	1	11840	3.6	450	1	12600	509	1	10006	379
68354	1	3	10300	4.1	419	1954 1956 1957	1	8600 10650 11650	4.2 4.0 4.1	357 427 473	1 1 1	10590 10320 12660	439 427 502	1	10083 10006	399 379
68355	1	1	13970	3.9	547	1958	1	13970	3.9	547	1	9680	401	1	11053	425
69978	126	211	10401	4.1	426	1954 1955 1956 1957 1958 1959	11 23 34 48 37 53 5	11979 11082 10597 9832 10752 10000 9912	4.2 4.0 4.1 4.2 4.1 4.1	500 443 434 410 445 400 409	3 18 22 22 14 33 4	10543 10752 10811 10236 11291 10777 11873	432 434 454 427 460 444 467	4 14 12 21 9 25 2	10053 10410 10844 10555 10592 10814 10268	412 423 444 438 437 446 425
70409	1	3	9020	4.4	393	1957 1959	2	7180 12700	4.4	315 548	 	9700 10380	404 452	1	9788 10595	
70757	1	2	10965	4.6	500	1957	i	10330		490						. , ,

TABLE 15.--DAUGHTEK-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE

SIRE NO.	DAUGHTERS NO.	RECORDS NO.		TEST PCT.	FAT L8.	FRESH YEAR	RECOROS NO.		TEST PCT.	FAT LB.	305-DAY I RECORDS NO.	MILK		YEARLY HE RECORDS NO.		FAI
						1958	BROWN :	281WS 11600	4.4	510						
72394	2	2	9335	4.0	375	1959	2	9335	4.0	3/5	2	10665	434	2	11156	451
72896	1	4	7808	4.0	313	1952 1953 1954 1955	1 1 1	8040 7860 83 7 0 6960	3.7 3.9 4.2 4.2	296 310 350 295	1 1 1	7250 7860 7670 7610	288 315 313 311	1 1 1	8055 7467 8262	325 295 336
733 18	1	2	12620	4.1	515	1957 1959	1	14020 11220	4.2 3.9	586 443						
74062	1	1	13060	3.7	478	1959	1	13060	3.7	478	1	10750	426	1	10333	407
75281	1	3	10070	3.9	398	1956 1957 1958	1	12140 10460 7610	4.2 3.8 3.8	505 401 289						
7 59 13	1	1	7680	4.2	326	1959	1	7680	4.2	326	1	10480	424	1	10333	407
76059	176	284	11000	4.4	481	1953 1954 1955 1956 1957 1958 1959	2 13 21 50 43 68 81	10650 10881 10910 10617 9737 11100 11267	4.4 4.4 4.4 4.4 4.6	493 482 475 464 429 482 490 552	1 17 26 16 19 48	10090 11050 11867 11905 10616 11204 11842 12348	413 459 482 492 447 470 498 535	1 4 16 24 16 16 41	9112 10895 10731 11349 10826 10409 11418	372 445 439 466 451 445 477
762 02	2	3	12058	3.7	446	1956 1957	1 2	5660 14010	3.7 3.7	208 519	1	11460	407	1	10006	3/9
7/319	80	111	11038	4-1	455	1955 1956 1957 1958 1959	1 6 7 25 64 8	9700 10967 10350 11054 11294 10670	4.1 4.5 4.2 4.2 4.1 3.9	393 490 438 461 466 407	1 2 3 6 39 6	10610 10275 10050 10632 10515 9753	449 440 419 440 428 397	1 3 3 3 3 5 2	11107 9657 12615 10181 10334 9859	458 421 523 426 420 415
77775	3	3	9127	4.1	379	1959 1960	1 2	3900 11740	3.9 4.2	152 492	1	9630 13280	423 561	1	11827	485
78152	138	224	10904	4.1	445	1954 1955 1956 1957 1958 1959	1 14 40 50 39 71	13610 12121 11319 10910 10759 10673 8027	4.1 4.1 4.1 4.1 4.2 4.1 4.0	552 494 468 451 444 439 322	1 11 21 22 9 44 5	10530 10904 11189 11627 11468 10980 9900	431 446 445 452 463 456 416	10 17 22 3 37	10129 16794 10190 11427 10824 9821	410 438 423 473 445 426
79584	34	64	9979	4.1	412	1955 1956 1957 1958 1959 1960	3 12 20 14 13 2	10760 10499 9626 10528 10665 11090	4.1 4.2 4.1 4.2 4.2	442 435 400 432 446 463	3 9 12 5 8 1	11530 10947 10713 10952 10855 8860	463 442 435 454 451 384	3 8 10 6 8	9527 10808 10899 11073 10490	375 438 447 453 424
80699	1	1	12120	4.0	484	1960	1	12120	4.0	484	1	10320	475			
8 16 52	3	3	9697	4 - 4	428	195 7 1959	1 2	8370 10360	4 - 6 4 - 4	384 451	1	10190 12660	428 499	1	13941 12502	592 498
82405	13	17	11229	4.3	477	1953 1955 1956 1957 1958 1959 1960	1 1 3 2 5 4	12530 13210 10800 13510 11754 10233 10790		490 510 453 548 485 450 492	2 i i i	12095 12530 11000 8930 10790	522 497 462 356 457	1 1 1	7804 10584 12045 11325	317 445 496 463
824 62	2 1	1	15460	4.3	666	1959		15460		666	1	11810	473	1	10333	423
83625		3	9380	4.6	433	1957 1958	1 2	9670 9235		406 446	1	10090	426	1	13941	572
84052	2 28	37	11303	4.0	456	1957 1958 1959 1960	1 17 14 5	11070 11154 11057 9836	3.9	446 442 453 384	1 5 11 4	9880 10656 10683 10158	393 446 452 409	1 2 11 1	6518 8170 9993 9374	275 333 417 400
85003	3 1	1	9390	4 . 3	400	1953	1	9390	4.3	400						
86139) 1	2	12520	4.7	579	1957 1958	1	12400 12640		594 563						
87630) 1	1	11750	4.2	492	1957	1	11750	4.2	492	1	10780	450	1	9788	419
8767	1	1	8620	3.4	294	1959	1	8620	3.4	294	1	11450	455	1	11271	475
8768	1	1	8070	4.3	347	1959	1	8070	4.3	347	1	10460	423	1	10333	407
88940	71	108	10653	4.1	435	1957 1958 1959	18 39 45	10537 10721 11199	4 - 1	437 439 456	6 17 32	10947 10088 11003	450 421 456	6 17 24	11476 10268 10649	473 427 437

OH10

4.0 454

11360 4.0 454

9620 365

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED.

8Y YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

ОНІО

TABLE 15.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY BREED,
BY YEAR OF FRESHENING--RECORDS FROM THIS STATE ONLY

DAUGHTER AVERAGE BY SIRE RECORD AVERAGE BY SIRE BY FRESHENING YEAR 305-DAY CONTEMP. AV. YEARLY HERD AVERAGE RECOROS MILK FAT RECOROS MILK FAT NO. LB. LB. NO. LB. LB. FRESH RECORDS MILK TEST FAT YEAR NO. LB. PCT. LB. SIRE DAUGHTERS RECORDS MILK TEST FAT NO. NO. NO. LB. PCT. LB. M. SHORTHORN 1 7190 3.6 261 7858 1 1959 1 7190 3.6 261 1 7370 276 8578 331 3.4 3.7 3.8 1958 1959 6940 10120 238 379 8750 9830 314 394 845B 317 9832 427 27712 3 7980 3.6 293 1960 6880 263 6530 1954 1956 1957 7230 4.5 7800 3.9 7050 4.0 71059 3 7360 4.1 303 323 7230 291 8012 308 305 281 7250 8960 6050 8807 294 247 350 340 1958 10280 3.9 9850 3.8 2 10625 121506 2 3 10380 3.9 404 398 409 7870 300 1959 8670



